

THE NATIONAL WOOL GROWER

VOL. IV.

MAY, 1914

NUMBER 5

Vermont Merinos

(By ROSCOE WOOD)

HOW many men who are now in the sheep business know that there was a time when the little commonwealth of Vermont was the best known sheep state in the Union, that Addison county was the greatest fine wool section in this broad country; that Middlebury was the Mecca of the progressive sheepman? What made it? The Vermont Merino, that little wrinkly, greasy sheep that almost every western sheepman of today re-
viles and despises.

There were times when those Vermont Yankees obtained as much coin of the realm from a small flock of 50 to 100 of these ewes as men do now from a whole band of two or three thousand.

To one who has been born and raised with Merinos there is over it all a glamor of romance which fascinates. We have long wanted to see with our own eyes this land whence came these famous woolbearers and to talk with the men who produced and developed the breed which made the first great improvement on the native sheep of this country, and were in fact the pioneer improvers of all American livestock. Recently we visited this land where the American sheep industry had its first practical beginning and whence it received its first great impetus that has carried it across this broad fertile continent and even to lands beyond the seas. From all this rough little state, all

told little larger than a western county, came the men, who with characteristic New England shrewdness and love of speculation first peddled Merinos among strangers and spread the gospel of more wool and better sheep around the world, incidentally profiting thereby, or was it the other way around? Here were the men whose interest in their Merinos and the consequent importance of the general industry to their business made them potent

development of general sheep husbandry did the popularity of those incomparable wool bearers wane, and when home markets failed them foreigners unexpectedly came to the rescue and rendered powerful support. There have been times of depression, there have been prosperous periods, there have even been occasions when a real boom was in evidence. Through it all, through dark times and bright, taking the bitter with the sweet, are men in

Vermont today who are breeding the wrinkliest, heaviest fleeced sheep they know how to produce. For they believe there are places in the world where conditions demand the use of these hardy, only woolbearers for breeding purposes in order to maintain such weight of fleece as will make general sheep husbandry in those sections most profitable.

Here are to be found examples of persistence and

continuity of purpose in breeding such as are rarely exhibited in America where livestock breeding is too often a mere shuttle-cock which is moved by every passing fancy or by every swing of the market price pendulum. E. N. Bissell is breeding wrinkly Merinos on the same farm where he was born over seventy years ago and where his father bred them before him. He still breeds them with the same purpose in view, the greatest amount of fine wool that can be



A Vermont Yearling Owned by Mr. Bissell

factors in the first organization of the National Wool Growers' Association and whose ability and influence gained them high place in its councils for many years.

If Vermont was not the birthplace of the American sheep industry it was the cradle in which it was rocked until lusty strength was attained. The influence of her Merino breeders for years was powerful in determining the character of the general business. Not until new conditions arose in the rapid

produced on a single animal, and showed us a ewe that shorn twenty-six pounds her second fleece at a year's growth. His entire flock averages twenty pounds. It reminded us of our boyhood days to go into his barn and see these wrinkly greasy sheep, and we wondered if they were much different from those days. As our memory serves us they seem to have improved the form with a wider chest, a flatter shoulder, a rounder rib, and a straighter hind leg. The fleece is very dense, the folds seem larger, and the staple a little longer; perhaps the oil flows a little more freely. The wool on the wrinkles is of better quality and not so much of the hairiness that used to prevail in many flocks. There is greater evenness of fleece on various parts of the body and better thicker wool on the belly. Improvement has been produced along the lines desired. He is a constructive breeder whose name looms large in the history of the development of Vermont Merinos and of the entire American sheep industry of the nineteenth century, and whose influence even goes beyond American confines and finds place in that of the leading woolgrowing countries of the world.

An affable courteous gentleman who has seen much of the world. His reminiscences of his experiences with Merino sheep not only on his native hillsides, but in foreign lands is interesting. Just about the time, as we look back, that the wrinkly Merino had reached and possibly passed the zenith of its popularity with American sheepgrowers, men from distant lands sought them. Then with characteristic enterprise these native Yankees took their sheep across the seas even as had their forebears in the times of the gold excitement in California carried thither their Merinos, both Vermonts and French, and exchanged their golden fleeces for the yellow metal. Of these exporters Mr. Bissell was the first to land Merinos in Australia and successfully dispose of them to Antipodean breeders over thirty years ago. Soon after his return to Vermont, the Australian sheep king, Samuel McCaughey, came to America and bought

a large number of Vermont Merinos. He engaged Mr. Bissell to superintend their shipment as far as London, and was so well satisfied with his methods that he commissioned his American agent and ordered him to purchase another shipment. This he did very satisfactorily, and in the fall of 1888 sent to Sydney by way of London, for American sheep could then be landed in Australia only after having theoretically become English sheep by means of a two weeks' quarantine in London. This shipment comprised five hundred head all told, and so far as known was the largest single consignment of American purebred livestock ever sent to a foreign country.

Mr. Bissell also went to Argentine with a shipment of Merinos a short time previous to this, but was preceded to this market by some of his neighbors. In recent years, however, he has shipped many sheep to South America on order. This again illustrates the reward of persistence and a fixed purpose. For a number of years the demand for his style of Merinos was very small and even his own family urged him to dispose of his flock for what it would bring. To all these influences he remained impervious. Then like sunshine from a sky long overcast came an order from Uruguay for a number of choice sheep at a price that makes average American prices of other breeds look cheap, as in truth they are. A keen judge and a man of the strictest integrity he filled this order so carefully and so well that he has practically established a steady trade with this faraway country. His description of the redtape requirements for shipping sheep to these distant points and the expense involved make range shipments of carloads and trainloads appear but a simple matter in comparison. The fact that these sheep are one to two months on the way with no other care than that supplied by the regular trainmen and boat crew and as yet none have died en route illustrates the hardiness and adaptability of these Merinos. The transportation expenses alone average one hundred dollars per head, so that one

can have some idea of the ultimate cost to the purchaser. In similar manner also has he shipped choice individuals to South Africa.

These breeders of Vermont Merinos were the pioneers in exporting American livestock. Within sight of the eastern bank of Lake Champlain lives the man who first took American sheep to South Africa. He has been to Buenos Ayres two or three times with Merinos and trotting horses and initiated the wealthy Latins of that country into the mysteries and pleasures of harness racing as well as the profit to be gained from using heavy fleeced Merinos when the distant rumble of a revolution warned him to seek other places to sell his wares. In his search he discovered that South Africa at that time possessed near thirty millions of sheep and as yet no Merinos had gone there. Here was a prospect. Without further ado he collected a shipment of forty Merino rams in 1891, and landed them at Cape Town, a stranger in a strange land far from home. He certainly gave the American consul at that place a surprise when he called on him and coolly informed him he had a shipment of sheep with him, and asked information and assistance in getting them landed and located for sale.

Through the consul he gained the ear of Cecil Rhodes and placed before this powerful gentleman such attractive description of his sheep and the benefits to be deprived from their introduction to South African flocks that the latter's curiosity and interest were sufficiently aroused to come to see them. With him he took the entire Cape Parliament in a body, which represented at that time all the states of the South African federation. Leading men from the various sections thus saw these American sheep and sent home descriptions of their excellencies, while the entire press of the country was filled with tales of these wonderful woolbearers. Which appeals to us as demonstrating beyond all cavil the ability of this man as a publicity promoter and a salesman. For he sold his sheep at good prices, and gained a clientele among the best breeders and

May, 1914.

wealthiest sheepmen of all South Africa. A little later he went far into the interior taking with him in addition to Merinos some Holstein Friesian bulls, going as far as Johannesburg where he sold Paul Kruger, a bull, and secured his influence in helping to dispose of his stock. This sale was made but a day or two before the Jameson raid, and his description of the attendant stirring times and his own difficulties in getting his stock out of the trouble zone again displayed not only his tact and skill in handling himself and his stock in trying times and places, but also the adventurous spirit which is unafraid and always willing to take a chance. He has made several subsequent shipments in which were included Rambouillets, and other classes of livestock, especially mules.

There are others in Vermont who play this export game. With most of them we are acquainted. Not all did we see, because even now some are afar selling their sheep. The man behind, however, never goes across the water. He is always willing to take the chance so far as finances are concerned, for it takes money and plenty of it to sit in a game like this, but somebody else takes the sheep and does the selling. He has furnished part or all the money for the majority of these shipments that have gone overseas. He himself is a keen judge of Merino sheep and has bought choice animals in every part of the United States. He has as intimate knowledge of the inner workings of this trade in various countries as any man, of the difficulties, the risks, the expense, and the profits which attend; of these we do not feel at liberty to tell here. He is shrewd, keen, ever alert for some new market. This last year he sent a shipment into the interior of Uruguay, and there his partner met a shipment from Australia in charge of an old-time Vermonter whom he had first taught the export business. Which shows that the world is not so large and where sheep sell for high prices and breeders appreciate the best there will be found Merinos, and probably an American, generally from Vermont, selling them.

THE NATIONAL WOOL GROWER

But of the many flocks which furnished the goods? Today the flocks of wrinkly Merinos in Vermont are neither numerous nor large. But a small fraction of the importance and activity of a generation ago remains. The breeders still producing the old-style sheep along the exclusive wool lines are few in number and old in years. There seem to be no young men to take their place, and as one by one these old breeders cross the silent river their cherished treasure of other days on which were placed their best efforts swiftly follows them into oblivion and the land, which saw their greatest glory and reaped therefrom a golden harvest knows them no more. Why should this be, we ask. For the men who have maintained their flocks have made money. In the answer would be involved a resume of the history of American sheep and wool growing during the last thirty years. Briefly, it may be said to be due to two things, the change in the purpose of sheep attended by the rise of new conditions and the development consequent thereon, and to the attainment by breeders in other sections, especially in Ohio and Michigan, of many of the best Vermont sheep, with the resulting loss of their home market.

The Vermont Merino was a great sheep in his time, and he did a great work for the general industry. He came at a time when the native sheep of this country sheared but two or three pounds, and in a few years he doubled and trebled that fleece. The men who produced the rams which accomplished this thought that there was no end to this wool production and increase in the weight of fleece. The wrinklier and heavier fleeced the rams they bred the more money they brought. To be sure there had been times of reaction and depression, but prosperous times had always returned. They did not seem to realize that their market in this country was narrowing, and that times were changing. Their first great American market, besides that to the breeders of the central states, was the great southwest range country. When the range industry moved northward and heavy

wooly fleeces were not adapted to its climatic rigors and therefore could not use these Vermonts they failed to note its importance. Likewise did they fail to foresee the time when fine wool would not command the premium which it had always enjoyed, and that the end of sheep would be the block instead of the open prairie.

Even when the decline of their western trade became patent to most of them they still proclaimed that they were raising their sheep for breeders, and that the time could never come when their flocks would cease to be the fountainhead of all Merinos. They considered their natural conditions to be so peculiarly adapted to the production of these fine heavy fleeces that they would not admit that Ohio and Michigan could produce as heavy fleeces of as good quality as could be grown on their hillsides. In spite of the fact that men who were as capable breeders had for years bought the best sheep in Vermont and carried them west to their rich farms and were nearer to the rangeman's market with their product, they still persisted. They looked back to the times when Merinos had been high and low in price, and said they had always come back. They insisted that history repeats itself. In the meantime as sales grew fewer and at lower prices, one by one the erstwhile flocks dropped from sight, and no young men appeared to maintain and carry them on. The eyes of youth looked ahead and could see no chance for securing from these wool producers a profitable income with any surety. It was uncertain at best, the level of values had declined so far from the old times, the demand appeared so slight and at the same time so discriminating that they refused to continue the business of their fathers.

Those old-time values look like mountains beside present prevailing prices for good breeding sheep of any breed in America; and the fluctuations were something like a mountain snowslide. There were times in the middle of the last century when thousand dollar rams were as common in Vermont as ten dollar ones are now on the western range. Men paid five thous-

and dollars for a single ram and ten thousand dollars was actually refused for another. One breeder collected \$6,500 insurance upon one ram that died in his possession. A man still living in Vermont told of selling a ewe for \$2,500. The ordinary service fee was ten to twenty dollars. One ram even commanded a hundred dollar bill for a single fee. There were fluctuations. A ram sold at \$2,500 was bought back three years later by his breeder for a ten dollar bill. One man refused \$2,200 for four ewes and later sold one of them for eight dollars. They had seen these times, and they could not believe they would not repeat.

No doubt one factor in keeping them strong in their faith was the foreign trade with its good prices which came at just about the time when the home market was disappearing. Men came from Australia and paid two to five hundred dollars for rams and proportionately for ewes. Then not satisfied, they contracted one man's entire crop of lambs in the winter before they were dropped at \$250 per head to be taken the next fall. When the foreigners came no more themselves, native Vermonters took these wrinkly wool-bearers to the foreign lands. They took the best, and as the other lands reached the practical maximum of wool production in the individual sheep, these breeders were constantly forced to find new markets. Further, this very fact that they sold their best, if they got the price, depleted their own flocks and gave their customers as good or better than they had themselves.

That the Vermont Merino will ever again be in general favor in this country seems very doubtful, at least not in the form in which he gained his greatest fame. Conditions have changed. At the same time there are many sections in this country and in foreign lands where the general industry will look for a long time to rams of oily heavy fleeces in order to maintain their weight of fleece and quality of fiber. In hot, dry countries, the climate so quickly dries and lightens and harshens the fleece that recourse must be

had to outside sources for breeding stock. Combine with this the characteristic Merino hardiness and ability to live on scanty rations, and it would seem as if there would ever be a good market for the breeder who has the ability to recognize the peculiar demands of his market and to develop and produce a heavy fleeced Merino which meets them.

THE PACIFIC INTERNATIONAL LIVESTOCK EXPOSITION.

Fourth Annual Show, North Portland, Oregon, December 7-12-14.

Generally any movement out of the ordinary is of necessity of slow growth. The promoters of the Pacific International, however, have reason to congratulate themselves on account of its rapid growth.

Four years ago the show started in a very small way the premium list was not comprehensive, being confined to fat stock alone. The 1913 exposition was a revelation to those who saw the first show, a magnificent display of over 3,000 head of livestock being shown. It was not common stock that was shown, but stock that would be "in the money" at any similar show in the United States. In fact many of the animals shown were also winners at many of the state fairs and at the Chicago International and National Dairy shows. It was the opinion of prominent judges that no show was ever held in the west equal to the 1913 Pacific International.

Classes covered are beef and dairy cattle, fat cattle, fat and breeding swine, fat and breeding sheep. As yet no classes have been made for horses, next year's exposition will probably be made to include this division.

The sheep classes have been made stronger this year and many exhibitors from further east are expected. Keen competition is assured.

THE WEST FORGOTTEN.

To the National Wool Grower:

Enclosed please find money order to

cover subscription. I thought at first that I should have to owe you a debt of gratitude, as nowadays a business man is lucky to be able to collect even his own thoughts. Of course, with plenty of rubber elastic in our currency as well as our suspenders, we should be able to bounce over the bridge of suspense and then over the milk cows, and feel just as contented as a fat old man snoring all night long, in the next room.

I understand that the Oregon Wool Growers' Association passed resolutions criticising the action of our senators in voting for free wool, because free trade wool, means that we must substitute for our slow maturing fine wool Merino type that it took nearly a generation to build, for any old kind of coarse wool cross of sheep to help pay expenses. And if stockmen turn their attention to plowing up their range land the grass production will be gone forever. I suppose the wail set up about the insidious lobbyist, "a creature designed for kidnaping unsuspecting senators," was responsible for the adverse influence created. The next time we find any of our representatives to congress from the West "under a spell." I am in favor of conjuring a smiling fairy as in the days of yore, to breckon to these wonders from the West with the motto on her emblazoned wand: Follow me—back to the cocoanut groves. It appears to me that the old Democratic slogan, "The Greatest good to the greatest number," is twisted out of shape, as nearly everybody in the United States wears more or less clothing (judging from illustrations in Ladies' Home Journal, also Police Gazette) while a few Eastern manufacturers get all the profit.

Yours for fair play,

JOE. F. CONNELLY,
Oregon.

J. N. Burgess of Pendleton, Oregon, recently said: "Instead of selling our wool this year at 15 and 16 cents, we would have received about 21 cents if the tariff had been let alone."

Many new sheep advertisements will be seen in this issue.

Boston Wool Market

(By Our Boston Correspondent)

APRIL has been a quiet month in the wool trade, more particularly in relation to the movement of domestic wool of all kinds and grades. Experienced wool men say that there has been less domestic stock to work with than has been known for years. This is true, not only of Territory and fleece wools in the grease, but also of pulled and scoured wools of all grades. Perhaps the scarcity in scoured wools is the most surprising feature of the situation, for while it often happens that greasy wools are

also been sold, both here and in Chicago, and supplies are now down to the current pullings. As this is the season when shearlings predominate, and many of the pulleries are closed down for the season, supplies of pulled wool are likely to decrease for some time to come. As far as values are concerned, very little changes have been noted of late in either pulled or scoured wools. Prices are felt to be abnormally high, and in fact have about reached the point where manufacturers will refuse to buy if further ad-

with such a title, also made it much more difficult to buy or contract for the new clip wool on what was considered a safe and reasonable basis. Undoubtedly the upward turn in Eastern markets since January 1 has put many thousands of dollars into the pockets of Western flockmasters, a result that could not be foreseen when the duty was removed by congress. That it was entirely unexpected shows that there is no surety of present conditions prevailing for any great length of time. Some of the more conservative wool



The First Steam Shearing Plant in the United States, 18 Miles North of Soda Springs, Idaho. Built in 1896. Photo Furnished by Arthur Roberts, Afton, Wyo.

fairly well cleaned up, there is usually many off lots, or accumulations of wool, the "tail-enders" so to speak, which dealers find slow of sale, and which manufacturers pass by in indifference. If anything of this kind exists this year, it does not appear. The largest handlers of scoureds in this market complain that they have no stock from which to draw to meet the needs of their customers, a fact that is particularly aggravating in view of the active demand from the mills.

Accumulations of pulled wools have

vances are insisted upon. No clip for a great many years has been cleaned up on so satisfactory a basis as that of 1913. Not that the general level of values was so high. Of course this could not be true under free wool, but so sharp a rally, and so keen a demand, so soon after the removal of the duty, was a surprise to the trade, as welcome as it was unexpected.

From the dealer's standpoint, this is not an unmixed blessing, for while it helped to sell the remainder of the old clip, the "boom," if it may be dignified

men here say that the market is rapidly getting top-heavy, and are trying to put on the brakes and hold back the speculative element. They deprecate the fact that such extreme prices have been paid in the West, and say that it may yet prove that the growers who contracted their wools are to be congratulated.

One point that has not been enlarged upon to any great extent concerns the manufacturer particularly, and yet may work out a serious effect throughout the whole trade. Owing to the late

date fixed for free wool to become operative, the mills were obliged to use a much larger proportion of domestic wools in samples for the heavy weight season just closed. Having made up their samples, it is a difficult matter to change from domestic to foreign wools in the middle of the season, a fact which explains in part the little flurry in domestic wools developed in this market during the past three months. When the next heavy weight season opens, the competition from abroad will be keener, and manufacturers will have the whole world to draw from in making up their sample pieces.

It is true that prices abroad are also abnormally high, but it is a question whether such conditions will continue after the foreign wool and goods market have readjusted themselves to the tariff changes made on this side. It is said that Boston is still below a parity with London on desirable grades of Australian fine Merino wools, and yet this did not prevent the heaviest purchases for years at the last London sale. Such wools are predicted to touch even higher levels at the May series, and fine crossbreds are also expected to show a great deal of strength, but medium crossbreds may ease off a little. Offerings will total 188,000 bales, of which 130,000 bales are New Zealand crossbreds. This is an unusually large proportion, and there is considerable interest to see how the managers of the sale will work off so large a volume of wool, without breaking prices. A large number of buyers from this side will be in attendance, and as usual are not likely to return empty handed.

Arrivals of foreign wool have been very heavy during the past month, the total for the month of April being 24,743,477 pounds, against 5,403,258 pounds for the same month last year. Since January 1, 1914, total arrivals of foreign wool have been \$80,591,481 pounds, against 35,644,905 pounds for the same period a year ago, and 50,286,537 pounds for the same period two years ago.

Naturally, the prevailing conditions here have forced the trade to give most

of their attention to foreign wools, fine Merinos and fine crossbreds being most in demand. There have been no further advances in values, but old quotations are well sustained, with fine wools well sold up. So much of the wool arriving was either bought in primary markets for manufacturers' account, or was sold in transit to dealers or manufacturers, that offerings on the market have been much more restricted than the statistics of importations would indicate. Some of the largest manufacturers have been in the market lately and have picked up many good lots of both fine Merinos and crossbreds. Dealers say that there is no burdensome stocks here of foreign wools, not even of medium crossbreds, which have attracted least attention from mill buyers. For some time 46s, both New Zealand and Australian were neglected, but lately they have begun to move again, and some good-sized transfers were made in the latter half of April.

Practically all the Australian and South American wools destined for this market are here or on the way, except such as may be picked up at the London auctions. Following the May series, there is not likely to be liberal offerings of wools suitable for this side until fall. Therefore manufacturers will be obliged to turn their attention to the domestic sources of supply very shortly. Undoubtedly they are greatly interested in the development of the new Territory season. In fact, it is hinted in some quarters that the withdrawal of some of the larger houses from active contracting was due to the protests of manufacturers that values were being forced to a point which made them actually prohibitive for them. They claimed that they could not compete with foreign manufacturers if their raw wool was to cost them so much.

What effect this protest may have had is problematical, but it is true that less contracting has been done of late, and the bulk of the trade has refused to follow the lead of one or two houses in paying the extreme prices demanded by growers. Contracting is still being done, it is true, at various points

throughout the Territory wool section, but much more quietly than earlier, and prices paid have averaged lower. Montana growers are said to be demanding as high as 20 cents in some cases, but it can not be learned that over 19 cents has been paid at any time, while 17 to 18 cents will probably cover the recent contracts in that state. Extreme prices asked by some growers indicate that they have made up their minds to wait until shearing before selling their wool. In other states, something has been done, especially in western Idaho and eastern Oregon.

Interest in the new clip Territory wools is being slowly transferred from the ranges and shearing pens to the Eastern market. Arrivals thus far have been small, mostly made up of Arizona wools, with some Nevada and a little Utah. New Arizona wool has sold in the grease at 20 to 22 cents, new Utahs at 21 to 22 cents and new Nevadas at 18 to 20 cents. The scoured cost of these new wools is estimated at 53 to 55 cents for Arizona and Utah clips and 54 to 56 cents for Nevadas. All the wools are reported to be looking very well, especially the new Utahs, which are estimated to be fully 3 per cent lighter than last year. Arrivals are being taken up promptly as they come in, and some contracts have been transferred bodily, in some cases at a profit to the original contractor of fully 5 cents a pound.

In the fleece wool sections, but little has yet been done, though it is reported that some medium clips have been secured in western Ohio at 22 cents. Dealers have settled upon 18 cents for fine and 20 cents for medium fleeces, as about what they ought to pay for the new clip wools. In view of the strength of the market here and the high prices at which the remainders of the 1913 clip were cleaned up, it is doubtful if growers will accept such figures. Last sales of sizable lots in this market were made at 28 cents for fine washed delaine, 24 cents for fine unwashed delaine, fine unwashed clothing at 22½ cents, and quarter blood combing at 24 cents. Practically noth-

ing is left here but odds and ends of the old clip.

Regarding quotations on Territory wool, not much can be said. Occasionally a little lot of old wool changes hands, but at figures that could hardly be realized when the new clip is here in volume. Scoured wools are selling in a small way at 53 to 55 cents for choice fine, and occasionally a little more, while fine medium wools are selling at 50 to 52 cents. Pulled wools are quoted at 58 to 60 cents for the best brushed wools, with ordinary pullings at: Fine A supers, 53 to 57 cents for Eastern and 50 to 52 cents for Chicago; A supers, 49 to 52 cents for Eastern and 47 to 48 cents for Chicago; B supers, 40 to 43 cents for Eastern and 38 to 40 cents for Chicago; combing pulled, 48 to 50 cents for fine, 44 to 46 cents for medium, and 37 to 40 cents for coarse.

A USEFUL RANGE SHEEP.

To The National Wool Grower.

After an experience covering a third of a century in growing and marketing wool and handling sheep on the western slope of the Rocky Mountains in Montana, beginning with Cotswolds and breeding up to a high grade Spanish Merino to revert to the mutton breeds again during the operation of the Wilson-Gorman law, we have at last arrived at the conclusion that the breed of sheep, that will best meet all the conditions of range and climate and the many oscillating demands of the wool-market, is the large, smooth Rambouillet.

For the past fourteen years the Davis & Williams Company have handled this breed of sheep. We have endeavored to carry out the original idea of the French government, viz: to grow a long, fine and desirable staple on a fairly good mutton carcass. We flatter ourselves that we, along with many other woolgrowers in the West, have succeeded.

We select the large boned, smooth type, never overlooking the mutton qualities.

We find they handle well on the range are prolific and hardy, and under

proper care, grow to a size equaling many of the mutton breeds.

In proof of these statements I will give some actual personal experience. We have weighed rams 22 months old that averaged 285 pounds. This year we sold 2,000 two-year-old wethers that weighed, February 15th, 132 pounds. These sheep were hay-fed and were good enough to bring 5 cents per pound, weighed at the ranch. Our aged ewes and culls, after grazing on alfalfa meadow sixty days, weighed 129 pounds and brought \$4.25 per cwt. at home.

As to prolificacy: From 1,136 ewes lambed in April on alfalfa hay, under sheds, we marked and turned on the range 1,525 lambs. Last April five of our registered ewes in one afternoon



Rambouillet Rams owned by Williams & Davis,
Deer Lodge, Montana

dropped fifteen lambs. One registered ewe, purchased in Ohio, soon after her arrival dropped three lambs, two rams and a ewe. One of the lambs at one year old weighed 200 pounds and sold for \$100. The other at two years sold for \$125. The ewe we still have.

While I do not consider triplets desirable, I mention these facts to show that this breed is among the most prolific of sheep.

The Rambouillet ewes are good mothers and are admirably adapted to crossing with Shropshire or Hampshire rams in the production of lambs for market.

C. H. WILLIAMS,
Deer Lodge, Montana.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC.

Of National Wool Grower, published monthly at Salt Lake City, Utah, required by the Act of August 24, 1912.

Note:—This statement is to be made in duplicate, both copies to be delivered by the publisher to the postmaster, who will send one copy to the Third Postmaster General (Division of Classification), Washington, D. C., and retain the other on the files of the postoffice.

NAME OF— POSTOFFICE ADDRESS
Editor, S. W. McClure. Salt Lake City, Utah
Managing Editor, S. W. McClure

..... Salt Lake City, Utah
Business Manager, S. W. McClure.

..... Salt Lake City, Utah
Publisher, National Wool Growers Association Co. Salt Lake City, Utah

Owners: (If a corporation, give names and addresses of stockholders holding one per cent or more of total amount of stock.)

National Wool Growers Association Company and twenty other State Wool Growers Associations. No stock is held by individuals.

Known bondholders, mortgagees, and other security holders, holding one per cent or more of total amount of bonds, mortgages, or other securities:

None. S. W. McCLURE,
Sworn to and subscribed before me this 9th day of April, 1914.

(SEAL) W. O. CLELLAND,
Notary Public.
(My commission expires Sept. 7, 1914.)

IMPORTING CATTLE.

In Central and South America it is said that large numbers of small native cattle are to be found. Under the old tariff law none of these have been imported as the duty shut them out as well as the fact that they were liable to convey disease to our livestock. Two or three years ago an effort was made to bring several thousand of these cattle to New Orleans, but for the above reasons the undertaking was abandoned. The removal of the duty has again brought these cattle to the attention of speculators and a strong fight is being made to get the department of agriculture to permit their entry. Protests against their admission have been made by several important livestock organizations on the grounds that they will convey diseases to our native stock.

SOMETHING NEW.

By Professor James W. Wilson, Director of the South Dakota Experiment Station, Brookings.

On the cover page is a picture of the first two lambs of the new breed of sheep recently imported by Professor N. E. Hansen, while on his trip last summer in Siberia, gathering a supply of alfalfa seed for the semi-arid conditions of South Dakota. Yes, these lambs are new, being only a few weeks old. Each was born without a tail but had a development on either side of the place where the tail ought to be. When these sheep arrived at the station they were reported as being of the fat-tailed variety, but this was a mistake and, as far as we know, this is the only flock of its kind in the United States. In Montana there is a breed, but the sheep have a rudiment of a tail. In Texas there is a breed, but it is the Persian fat-tailed. In Indiana there is a breed called the "Tunis," but the sheep have fat tails. The newspaper boy asks "is there anything new."

Yes, this station, through Professor Shepard's efforts, has developed the only sugar beet in the world, so far as we know, that is one-quarter sugar. In his work he discarded better varieties than the average of the best now grown commercially for the production of sugar.

When you meet the politician who is running for a minor office he will ask, "Is there anything new." Yes, the surplus imported alfalfa seed that Professor Hansen brought back is being sold at \$5 a pound all over this country, from Nova Scotia to Seattle, and from British Columbia to New Mexico. One order has been sent to Belgium and an inquiry received from South America. The new idea of Hansen or the "Hansen way" of growing alfalfa seed appeals to the people; and certainly it is new to use a tobacco planter to set out alfalfa plants. It seems quite new to me indeed, to read an advertisement in the Breeders' Gazette of Chicago, of alfalfa plants for sale. This is the result of the "Han-

sen way" of growing alfalfa and never before has an advertisement of this kind appeared, and hence it must be new.

In the plant breeding laboratory of the South Dakota Experiment Station there are many new things. The latest is a two-inch, two-ounce plum, the Waneta, a cross between the Japanese plum and the native plum, perfectly hard, is new and is of unknown value to the semi-arid conditions of the northwest. Hundreds of crosses will come into bearing this next year and every one is new.

We will report progress made in crossing this new breed with our other breeds of sheep, and the progeny will be without tails, and new.

AREA OF NATIONAL FORESTS.

The following table shows the net area of the National Forests in the United States. This does not include private lands within these Forests.

| State. | Acres. |
|------------------------|------------|
| Arizona | 12,648,525 |
| Arkansas | 1,233,371 |
| California | 20,555,680 |
| Colorado | 13,423,759 |
| Florida | 311,140 |
| Idaho | 17,712,444 |
| Kansas | 143,943 |
| Michigan | 87,711 |
| Minnesota | 1,198,360 |
| Montana | 16,252,154 |
| Nebraska | 520,427 |
| Nevada | 5,355,437 |
| New Mexico | 9,095,523 |
| North Dakota | 6,734 |
| Oklahoma | 61,480 |
| Oregon | 13,577,041 |
| South Dakota | 1,142,180 |
| Utah | 7,278,720 |
| Washington | 9,841,753 |
| Wyoming | 8,372,537 |

Total of 160 National Forests in continental United States. 138,851,919

In addition to the above area there has been acquired in the South Atlantic States 103,186 acres of land under the Weeks Act that are to be used for forest purpose. The total area of the National Forest is small when compared with the total area of the United States.

WOOL COST COMPUTER.

The National Wool Warehouse &

Storage Company of 4300 s. Robey St., Chicago, have put out a small rule to be used for the reckoning of the price of wool. This is the most unique and useful devise we have yet seen for estimating the clean or grease value of wool. Its operation is so simple that every one can work it successfully and yet it may be carried in the pocket like a lead pencil. Every wool grower should have one of these clean cost computers and we suggest that they write the above address and ask that one be sent them. We understand that they will be sent free to all applicants.

Last year we sent out nearly 2,000 wool wheels that were kindly furnished us by Mauger & Avery of Boston. We think, however, that this rule now issued by the Warehouse is more simple and workable, though the wheels were very satisfactory.

MEASURING HAY IN THE STACK.

The following is quoted from Better Farming Bulletin No. 8, published by the University of Nevada Agricultural Experiment Station:

Question: How should one measure ordinary haystacks? How many cubic feet make a ton in a stack of alfalfa?

Answer: One-third the over, times the length, times the breadth gives the cubic feet. Divide by 512 to give tons. This is the rule generally used in Nevada.

New Mexico has the following hay-measuring law: Multiply the width in feet by the over; divide this product by 4; multiply this dividend by the length. This gives the contents in cubic feet. Then divide by 512, the number of cubic feet to the ton.

The stockmen of southern Idaho have adopted the following rule: Subtract the width from the over; divide by 2. This gives the height of the stack. Then multiply this dividend by the width; multiply this product by the length. This gives the contents in cubic feet. Then for 8 feet square per ton divide by 512; for 7½ feet square per ton, divide by 422; for 7 feet square per ton, divide by 343.

English Wool Trade

"AMERICA TO THE RESCUE" (From Our Special Correspondent)

WE are face to face today with conditions which on the surface are somewhat anomalous, but judged from actual results, they show that the raw material is still of prime importance to every branch of the industry and however much grumbling may be heard about the unprofitableness of business, we find that on the whole mills are being moderately well run, and therefore consumption well maintained. The past month has not produced anything really startling in connection with the raw material, but consumption continues, and big weights of wool are consequently being shifted. We have known more prosperous times in the West Riding industry, particularly when viewed from a profit standpoint. No doubt the whole trade has fallen upon somewhat lean times, due to the struggle to keep mills running. It is a case today of profits being sacrificed in the interests of consumption, there being a great desire on the part of topmakers, spinners, and manufacturers to keep their factories running, no matter what the cost. Many people are convinced that it is cheaper to run even without profit, than not to run at all, and therefore a big effort is still being made to keep all machinery running, even though not much good is resulting. We take the view that little profits are satisfying the majority, and when trade revives, Yorkshire manufacturers will be able to do better, and more in harmony with the returns of the past two of three years. There is no doubt today that French spinners and manufacturers have benefited very materially

through the dyers' strike in Bradford a good twelve months ago, business that was then lost to that city never having come back again. Fashions seem to be favoring French dress goods too, and therefore we are finding today a somewhat lessened consumption in the West Riding, although in the aggregate it is still large.

Home Trade Lightly Stocked.

We find merinos occupying a forefront position, and they are somewhat more strongly entrenched than crossbreds. This is primarily due to the former being

iod a year ago, or 579,000 bales to the end of the March series in 1912. This shows a deficiency compared with 1913 of 151,000 bales, or a deficiency of 256,000 bales on the year previous. On the other hand the Continent has absorbed 1,041,000 bales, compared with 864,000 bales for the corresponding period of 1913, an increase of 177,000 bales. America has more than doubled her takings, having absorbed 72,000 bales compared with 33,000 bales in 1913. It will therefore be seen that so far as the home trade is concerned, stocks are very light, consequently Merinos especially are statistically sound. We are strongly inclined to think that many topmakers are very bare of supplies of fine wools, for whereas the majority of firms usually purchase good quantities in Australia, the season was practically over before the fact dawned upon the trade that merinos were safe, and when Bradford importing topmakers were willing to buy, the opportunity had slipped. All this brings home the truth that even if there is not going to be a very



Southdown

stronger statistically than crossbreds, and with spinners and manufacturers in the West Riding being very lightly stocked in merinos, prices bid fair to be very well maintained. A very important change was brought to light in the figures showing the distribution of supplies up to the end of the last London sales. Adding transit and direct import wools the quantity absorbed by the home trade so far this year is 323,000 bales, compared with 474,000 bales for the corresponding per-

serious squeeze til the end of the season large weights of wool are still required; in fact the condition of commission combers today gives unmistakable signs that many firms are badly off for supplies, there being several large topmakers who have no more than half the usual number of sorters working. This means that Continental topmakers have been more wide awake than those in the West Riding, but, of course, the latter could see nothing

short of a serious setback in values on account of trade being indifferent.

How the Situation Has Been Saved.

However, easy it may be to blame West Riding topmakers, spinners, and manufacturers, very few would have done different if they had been in their shoes. Only those actually engaged in the trade know what was passed through during the last three months of 1913, and but for the incoming of America, we are satisfied there would have been a serious setback in wool values. Many have argued that with America being such an indifferent buyer for so long, even the placing of wool on the free list would make very little difference for some time to come. That is exactly where the West Riding trade missed the bus. With a lower tariff, several departments of the American trade set to work, and the large increase of business in wool, as well as partly and fully manufactured textiles, just saved the west Riding trade from suffering a serious collapse. We know for a fact that many Continental wool importers were quaking for fear for two months, and it was only the commencement of United States buying that turned the tide. Of course, it is better for everyone that this should have taken place than that prices should have slumped. Bradford woolmen only proved true to their long pursued policy of looking before they leaped, and if they have made a mistake for one season, well, it can be got over, although the year is passing so quickly that there is little prospect of any profit being made before it closes.

The American factor in the wool trade today is a most important one, and cannot be ignored. We saw the extent of their operations at the last London sales, and competition of that order is certain to prove a very potent factor in establishing wool values. We know for a fact that American manufacturers are by no means feeling comfortable, and before the next three months have passed they will have to face keen Yorkshire competition for the spring trade of 1915. Still, if wool is called for either on the part of Yorkshire or America, prices will be maintained, and as far as

one can see there is little to indicate that very much change from today's values is likely.

Sound Call for Merinos.

Whether a profitable trade is being done or no the call for fine wools remains sound and healthy. Fashions no doubt are favoring them, and there is little today to indicate any radical change in the near future. It does seem strange that notwithstanding that many of the leading firms in Bradford and Huddersfield who make essentially high class worsted fabrics are quiet, there seems in the aggregate to be no diminution in the demand for merino wool. No doubt, for hosiery purposes a big call is being met with, and there are other important avenues where big weights are being shifted. We are told that woolen manufacturers are busier than those engaged in producing worsteds, but even those producing cheaper tweeds must have a certain percentage of wool to spin with mungo, shoddy and cotton. Therefore it looks as if all available supplies are earmarked, and if present indications are anything to go by, merinos not only seem able to take care of themselves, but also to move to a slightly higher level. The Conditioning House returns of both Bradford and the North of France clearly indicate that trade is not so bad as some are trying to make out. We know for a fact that the absorption of merino wool in France was never larger, and although in Bradford and district there is plenty of room for improvement, in the aggregate it looks as if all available supplies are being converted into tops and yarns, for prices are steady and firm. Fine Botany spinners complain a great deal of being quiet, and there is an absence of particulars, but somehow the majority continue to run their spindles, though they are finding it a very lean experience. Trade might be a good deal better, but it appears as if there is still sufficient turnover to absorb present stocks, and things will have to become a good deal worse before spinners allow spindles to stand.

Crossbreds About Steady.

The fleece of the mutton breeds is still meeting with a fair measure of

support, and trade we believe is larger in volume than many will give credit for. We have already referred to the Conditioning House returns of Bradford. There was an increase last month of over six per cent in the weight passed through, and no doubt many firms are making more use of the Conditioning House than formerly. Still the trade doing with the Continent shows a tendency to expand, and not to contract. There are signs that business with the Balkan States is assuming more normal proportions, and trade in Austria Hungary as well as Russia is not so depressed as it was last year. If one takes note of the expanding business being done with the United States, there is also further proof of more business doing. All this brings us back to first principles, namely, that wool must be going into consumption, and therefore we conclude that even crossbreds are not so badly situated as some are trying to make out. Many today contend that the sharp rise in February ought never to have taken place, the condition of trade not warranting it. Still at the last London sales the raw material was readily absorbed, and although there will be the top side of 100,000 bales available of New Zealand crossbred next series, any setback in medium crossbred will be well covered with five per cent, while coarse and fine crossbreds look like maintaining last sales' standard of values. We are beginning to think that the demand for the raw material is the best evidence of good trade or bad, and while we readily agree that there is room for improvement, particularly on the side of profits, the wool being grown seems today to be no more than the manufacturing world required to keep its spindles and looms running. Crossbreds during the month have been fairly steady in price with the exception of medium qualities, and these have eased one cent from the top point of February.

Trade Outlook.

Looking over the commercial horizon, we have an impression that business is going to continue at about today's level. The future course of the market

will largely depend upon America. That big country will either take raw material or partly and fully manufactured articles. Therefore, it hardly looks as if business will be a diminishing quantity. There are other markets which are somewhat slack, but taking one country with another, we fail to discern much to indicate a falling off in consumption. We think that taking all things into consideration the outlook favors a maintenance of today's values. We should not be surprised to see merino wool five per cent dearer next series, and crossbreds will not vary a great deal. We understand that there is going to be a diminished clip across the Atlantic, in fact, the world's supply of wool is not keeping pace with requirements, and although there may be an increase in South Africa and Australia, yet that increase will be annulled by the further falling off in the clips of South America. We also think that the English clip will hardly be as much as last year, therefore the present trade ought to be well able to absorb all prospective supplies.

The latest cable news from Australia indicates an expanding output in wool. According to Messrs. Dalgety & Co., the exports of wool from Australia and New Zealand from the 1st of July, 1913, to the 31st of March, 1914, were 1,783,000 bales from Australia, showing an increase of 195,000 bales; 441,000 bales from New Zealand, showing a decrease of 2,000 bales, making the total 2,224,000 bales which shows a total increase of 193,000 bales as compared with the corresponding period of last year.

TO CLASSIFY LANDS.

In the House of Representatives, April 18, 1914.

Mr. Kent introduced the following joint resolution; which was referred to the Committee on the Public Lands and ordered to be printed.

Joint Resolution.

Authorizing the Secretary of the Interior to make an approximate classification of the unreserved unappropriated public lands of the United States.

Resolved by the Senate and House of Representatives of the United

States of America in congress assembled,

That the Secretary of the Interior is hereby authorized and directed to make an approximate classification of the unreserved unappropriated public lands of the United States, excluding Alaska, the surface of which is chiefly valuable for grazing and which is not in his opinion sufficiently valuable for raising forage crops in conjunction with grazing, to such an extent that six hundred and forty acres will support a family, and which do not contain merchantable timber and are not susceptible of irrigation from any known source of water supply, and to make a report to congress on the first Monday of December, nineteen hundred and fourteen, which report shall recommend a definite plan for the disposition of such lands and shall contain maps showing approximately the area and location of such lands in each state.

ARIZONA CONDITION.

To The National Wool Grower.

The lambing season for the greater part of this state has been over from 30 to 60 days, although there are a considerable number of stockmen that stay north, who commence lambing the latter part of April and 1st of May. The number of sheep outside of the Coconino Forest Reserve in northern Arizona and go south to lamb, is approximately 90,000 head and about 25,000 or 30,000 head do not go south and lamb, but lamb later in the season in the north. There are also a large number of sheep outside of the Forest Reserve that go south in the winter to lamb.

This has been a better year than we have had for the last two or three years for feed and climatic conditions in the south and the percentage of lambs runs from 85 per cent to 90 per cent.

Some wool sold at the shearing corals at 19 cents, but the great majority of the wool has been consigned to Boston. Reports of sales run from 21 cents to 22 cents in Boston. The freight, commission, insurance and other

charges runs from 2¾ cents to 3 cents per pound.

Our February lambs we market from this section from the middle of June through July and August, either to Kansas City and eastern markets or sell direct to California packers, here. Late lambs sold in October, usually go to California.

The prospects generally are for a fairly prosperous season, which the sheepmen are very much in need of in view of the two or three hard years just past.

M. I. POWERS—Arizona.

FORMULA FOR WHITEWASH.

For buildings, fences, etc.

(1) Sixty-two pounds (1 bushel) quicklime, slake with twelve gallons of hot water.

(2) Two pounds common-table salt, 1 pound sulphate of zinc, dissolved in 2 gallons of boiling water.

(3) Two gallons skimmed milk.

Pour (2) into (1), then add the milk (3) and mix thoroughly.

SCALES IN STOCKYARDS.

The New Mexico Wool Growers Association have a suit before the Corporation Commission of New Mexico to compel the railroads to install scales in their stockyards so that all sheep may be weighed before loading. The wool growers have submitted a very strong case and hope to have a decision in time to be of service for this season's shipments. As the railroads fix an arbitrary minimum weight on which payment must be made, whether it is reached or not, it is probably that this fact compels railroads to furnish the shipper with facilities for determining what his car weights are.

Why not insist that our flag be made out of American grown wool now that the army is clothed in Australian wool.

More money is spent for the support of the District of Columbia each year by the government than is appropriated for agricultural enterprises.

Sheep Do Not Injure Forests

THE Agricultural Experiment Station at Pullman, Washington, has conducted a most thorough investigation of the influence that sheep grazing in the forest may have upon the growth of forest trees and have published their conclusions in bulletin No. 113, which may be had by addressing the college. Through the kindness of the college we have been loaned the three half-tones that deal with this subject in this issue.

This investigation was conducted by R. K. Beattie, botanist of the college, who on two successive years accompanied a band of sheep into the forest and stayed with them part of the season observing most closely the movements of the sheep and all plants eaten by them. The range used by the sheep was photographed both before and after the sheep had grazed it as well as on the season following so that in this way the full influence of sheep grazing in this forest was accurately obtained. Two bands of three thousand sheep each were kept under observation while in the forests of northern Idaho. The forests consisted of yellow and white pine together with some tamarack. We submit the following extracts from the bulletin in question.

"In the two very different regions of the summer range, the yellow pine and the white pine, the two bands of sheep mentioned above were grazed and studied in the month of August, 1911.

The typical method of herding them was as follows: The herder established his camp on the edge of a meadow, near a piece of level bottom land, or on the edge of a clearing on a hill.

Here was the bedding ground of the sheep; that is, the place where they were gathered for the night. To this same ground the sheep returned every night till they had grazed over all the ground available from this point. They were then moved on to the next bedding ground. This system is diagrammatically represented in figure 17, which represents the grazing plan for one week. In this case the sheep were moved from bedding ground A to bedding ground B on the first day. Bedding ground B is located on the edge of a small timothy meadow at a point



Figure 13. Bulletin. This Spot Was Used As a Bed Ground for Sheep for 4 Nights the Year Before This Picture Was Taken.

where two or three small ravines run back into the hills. Early on the second morning the sheep begin to stir and are guided out into the timber in the region marked 2. In the main they are started out on the side of the range opposite the ground they covered the day before. They are guided and held from too great scattering by careful quiet circling movements of the herder, who, after an early breakfast which he cooks and eats at his tent, puts in the most of the forenoon in handling the sheep. It is his effort to get the sheep out about a mile from the camp

in the forenoon and to spread them out in small groups so that all will have an opportunity to feed. Although the herder usually has a couple of dogs with him he uses these but little in the woods except in an emergency. Dogs are used more when the sheep are traveling along a public road. The McGregor outfits use dogs which are a cross between the collie and the Australian wolfhound. Sheep are easily frightened and, especially in the forenoon, will, if disturbed, hasten back to last night's bedding ground. By ten-thirty or eleven o'clock when the heat

of the day has arrived, the sheep find their way into the deep shade and lie down quietly for a noon siesta.

When the sheep settle down at noon, the herder goes to camp and cooks his dinner. About two or two-thirty o'clock or even later on hot days, the sheep rouse themselves and begin to graze back toward the bedding ground. The herder guides them back on the side of the grazing ground next to yesterday's path, hoping thus to pick up any stragglers which may have been lost the day before and are now hunting the other sheep.

By five-thirty or six o'clock the sheep have reached camp. The herder scatters small piles of crushed rock salt over the bedding ground and calls his sheep. They rush out of the woods, lick up the salt and gather closely together for the night. For an hour or two a period of adjustment occurs. During the day, lambs and their mothers have become separated. The first night on a new bedding ground is the most difficult night. So fixed is the habit of the sheep to return to the old bedding ground that continual care

must be exercised during the afternoon and evening to get them all together at the new place.

On the third, fourth and succeeding days, the sheep are handled as they were on the second day, till the range available from the bedding ground is exhausted. If the camp is established on the edge of a cultivated hay meadow, the feeding grounds will probably all lie to one side of the bedding ground as shown in figure 17. In other cases the feeding grounds may radiate in all directions. In any event the feeding ground which lies in the direction of the next bedding ground is saved until the last day.

On moving day, the herder starts

fort is made to water the sheep. The forage in the woods is so succulent that the sheep go for days at a time without drinking water.

What the Sheep Eat.

The author's notes on the food plants of the sheep have been gained by spending the days in the woods with the sheep, watching their feeding habits, identifying the plants as they ate them, and collecting herbarium specimens of the various species. Sets of the plants collected have been deposited in the Washington State College Herbarium and in the United States National Herbarium.

The determination of the actual plants eaten is made somewhat diffi-

to the ground. A fair estimate is that two-thirds to three-fourths of the sheep's time was devoted to the layer of brush, while the remaining one-fourth to one-third was spent eating the herbs on the ground. In this respect they differed from those mentioned in the usual reports on the food habits of sheep, which mostly devote their attention to the "grasses" which the sheep eat and discuss them as if their chief food consisted of grasses and tender herbs. Some authors have mentioned the browsing of sheep on the herbage of shrubs and trees, but most of the literature on the subject neglects this phase of the feeding. This may perhaps be due to the fact that in other regions the shrubs do not form as important a factor in the food supply of the sheep.

The White Pine Forests.

In the white pine forests the principal sheep food plant is the huckleberry. This plant forms a large part of the shrubby undergrowth. The bushes are vase-shaped and vary from one to five feet in height. In August, 1911, they were full of luscious acid berries, sometimes dark red but usually blue-black in color, and the young twigs were covered with large tender leaves. In the dense woods, these leaves remained more or less moist and succulent all day long.

In addition to the huckleberry, this region furnished an abundance of shrubby growth of various other species which the sheep consumed with relish. The following grazing notes were here taken:

Plants of the White Pine Forests Which the Sheep Eat Readily and Use Much for Food.

Broad leaved huckleberry. The most important sheep food in the white pine region.

Coral berry. Very much liked by the sheep. Especially abundant near the edges of the woods.

Service berry. Well liked but not very leafy and not very abundant in the deep woods.

Maple. Well liked but not very abundant.



Figure 14. Coral Berry Which Was Grazed Clean the Year Before. Note Perfect Recovery

the sheep out in the morning and moves them during the day toward the new bedding ground, endeavoring to get them there rather early in the day so that he may have plenty of time to make camp and pick up stragglers. From this new bedding ground the feeding system is repeated.

Sometimes when the feeding grounds are far from roads and in regions where wild animals are few, the herder will bed the sheep for a few nights away from his camp, but even then many of the sheep will often take matters in their own hands and return to the old bedding ground at night.

In the Mica Mountain region, no ef-

cult by the timidity of the sheep. It was only by the exercise of great patience and care that one could get among the sheep and close enough to them to make exact observations. Especially was this true in the forenoons. The desired result was attained usually by posting oneself on a convenient log or stump ahead of and in the path of the sheep, remaining perfectly quiet, making no sudden movements and observing most of the eating by the aid of a pair of binoculars.

In both regions studied, the sheep spent most of their time eating shrubby plants and young brush. Very little attention was paid by them to the grasses and herbs which grow close

Red dogwood. Well liked and fairly abundant.

Thermopsis montana ovata Robinson. Well liked but not abundant.

Menziesia glabella Gray. Abundant and much eaten but not supplied with a very large amount of foliage.

Honeysuckle. Abundant and much eaten.

Spirea. Much eaten but too small to furnish a very great amount of food.

Rose. Rather abundant and much eaten.

Alder. Abundant and much eaten.

False Solomon's seal. One of the delicate herbs which was much relished by the sheep and was fairly abundant.

sheep are very fond of this plant. They strip it of leaves and fruits as high as they can reach and beat down the taller bushes with their necks and bodies and eat up just as far as they can. Higher up on the mountains the sticky laurel replaces the buckbrush in the vegetation. It is equally relished by the sheep, but in the region studies the sheep rarely got up to it. The fruits of both of these species are very oily and are very fattening. Sheep grazing upon them become sleek and fat very quickly. These two plants are the most fattening on the range and altogether are the most valuable sheep food plants in this whole region.

While buckbrush is the most abundant shrub in the yellow pine forest,

Oregon grape.

Dogwood. Both of these plants are eaten readily but are not sufficiently abundant to be great factors in the food supply.

Goldthread. Eaten a great deal by the sheep but not large enough to be important.

Dogwood. This plant seemed to be eaten more by the sheep which were grazing in the yellow pine than by those grazing in the white pine.

Spirea. Readily eaten but too small to be important.

Plants Which the Sheep do not Eat.

Kinnikinnick.

Thimble berry.

Nutt. Princess pine.

These three plants are very rarely

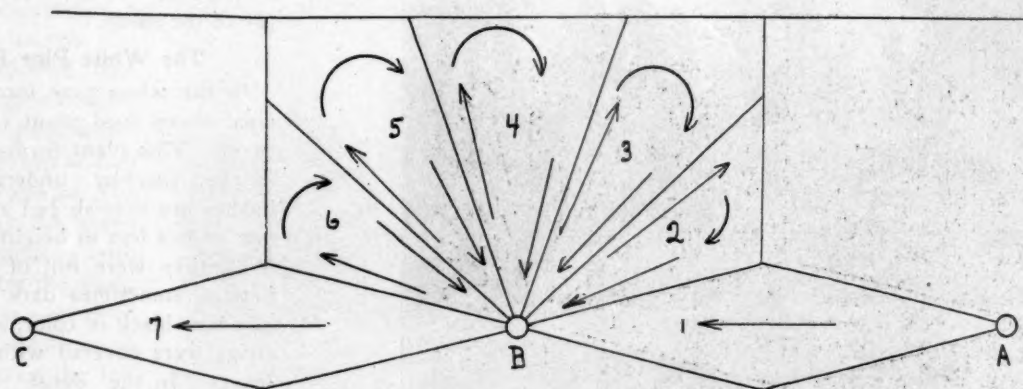


FIG. 17. Diagram of the herding system.

Plants Not Eaten at All.

Spleenwort.

Oak fern.

Kaulf.

White fir.

White pine.

Douglas fir or red fir.

At this season of the year (August), other food is abundant and the ferns and conifers are practically never eaten. During the four weeks in which the writer studied the habits of 6,000 sheep, he saw one sheep eat a few leaflets of spleenwort once.

The sheep are very fond of various species of mushrooms but these can scarcely be said to have much food value.

The Yellow Pine Forests.

In the yellow pine forests the principal food plant is the buckbrush. The

there are a number of other shrubby plants which are also used for food.

Plants of the Yellow Pine Forests

Which the Sheep Eat.

Buckbrush.

Sticky laurel. The two most important food plants of the region.

Coral berry. This plant is quite abundant in the yellow pine forests and ranks next to the buckbrush as a food plant.

Ninebark. The sheep eat the flowers and the surrounding bracts of this plant but eat very few of the leaves.

Maple.

Meadow rue.

False Solomon's seal. These three plants are eaten in the yellow pine region and bear about the same relation to the forage as they do in the white pine woods and meadows.

eaten by the sheep and enter not at all into the food supply for sheep of this region.

Effect of Grazing on the Forest.

Upon the questions connected with the effect of sheep grazing on the reproduction, fire protection, and other problems of forest management there are many differences of opinion. Many conclusions have been drawn based only on local data or on the mere opinions and prejudices of the men involved. Such conclusions are not only unscientific but they have often been the cause of mistaken forest policy and much ill-feeling among the parties affected.

The facts herein presented and the conclusions drawn relate only to the conditions as described herein when well-managed bands of sheep were be-

ing grazed on leased land which had an abundance of forage for the number of sheep which it was sustaining.

Forest Reproduction.

As far as the trees which make up the wood products of this forest are concerned, the sheep grazing observed had absolutely no deleterious effect upon reproduction. The sheep never ate the young coniferous trees or any of their foliage. There are no hardwoods produced in this region. The herding system described above scattered the sheep that there was no serious trampling or breaking of seedlings and young trees. The trails formed by the sheep were not deeply cut except in the neighborhood of the bedding grounds.

ed meadows. Across the road from it is a patch of coral berry which was grazed clean in 1910. It is represented after its recovery in 1911 in figure 14.

Fire Protection.

The actual grazing of the sheep has little bearing on the fire protection of the forests examined. The eating of the shrubby underbrush removes some of the danger of the start and spread of ground fires. But the sheep do not touch the young pines and firs and spruces and these burn much more readily than do the deciduous shrubs and trees. The presence of the sheepmen in the woods is, however, an aid in fire protection. That first and most essential thing in fighting a forest fire is to know quickly that one exists and

The usual contention that it is to the interest of the owner of stock to burn over the forest floor and thus to induce a new growth of weeds and grass can not apply to the sheepmen in this region. Weeds and grass are not what he wants. He wants the dense woods full of moist and succulent brush and these would be destroyed by a forest fire. In the Pacific Northwest, the fire season is the months of July, August, and September. These are the months when the sheep are in the woods and when the sheepmen most dread the fires.

After the forest is logged and burned over, it is several years before the brush re-establishes itself to such an extent as to form good grazing. Figure 15 shows a piece of yellow pine land which was burned over by the owner, the lumber company, after logging operations in 1907, four years before. It is not yet as valuable for sheep grazing as unburned land.

Relations of the Sheepmen and Local Farmers.

In the days of the open and uncontrolled range, much ill-feeling and hostility arose between the sheepmen and the local farmers of the region grazed over who were usually trying to raise some cattle and horses. The present leasing system followed by the Potlatch Lumber Company eliminates all such difficulty. The sheepman pays for and owns the grazing on certain definite tracts of land. The farmers have their own land or lease definite tracts from the lumber company. Each party knows his own land and respects the other man's rights.

In the olden days under the "first come first served" system of the open range, each year saw a race between sheepmen for the best land. The finest grazing was the most overstocked. Such strenuous competition resulted always in the disregarding of the rights of others and hostility was the inevitable outcome.

The writer believes that such grazing as is here reported of sheep on mountain summer range is a very important and valuable factor in the development of sheep raising in the northwest. The passing of the open, uncontrolled range



Sheep Grazing on Edge of Forest. Bulletin 113

The sheep feeding described had no deleterious effect on the shrubby plants and herbs of the region. The brush was as abundant when the grazing grounds were re-examined in the summer of 1912 as it was before the sheep reached it in 1911. Even the bedding grounds of the sheep were not all ruined by the excessive trampling and over grazing, as is usually contended by the opponents of sheep grazing.

Figure 13 represents a piece of ground which according to the men in charge of the sheep they had used for four nights as a bedding ground in 1910. It was taken before the sheep reached it in 1911. The spontaneous growth of timothy which has occurred is greater than is often found on plant-

to have some one there before it is large. The sheepmen fear fire. Their sheep are very unwieldy and in case of a fire of any size would be destroyed in large numbers. They are, therefore, very watchful of camp fires, both of their own and of other campers whom they may find in the woods. The woods during the huckleberry season are well filled with campers, many of whom are inexperienced and do not realize the fire danger. The sheepmen are constantly on the lookout and are ready to get word to the forest fire patrol and to stamp out a fire in its incipency. They clear out the roads so that they may move their sheep and camp supplies and thus make the country accessible to the fire fighters.

should not mean the passing of sheep grazing. Sheep are valuable animals for any country and where so much range land must always remain available, it ought to be used wisely under a leasing system so that it will not be abused, for the production of a large amount of mutton and wool.

Summary.

1. The use of the winter range is conditioned on the use of summer range.

2. In the region studied, shrubby plants and brush are much more important as sheep food than are grasses and herbs.

petition, over-grazing and grazing feuds, and is by far the most satisfactory method of handling these lands.

9. Well-managed sheep grazing, such as is here reported, is a valuable and important factor in the sheep business of the northwest. Such grazing should be encouraged and extended till every square mile of available summer and winter range is in use and the wool and mutton used in the northwest is produced in the northwest.

AUSTRALIAN SALT BUSH.

Some years ago the California expe-

combined. It is the standby and in many sections is about the only thing that will grow. It is highly drouth resisting and grows best on hard land where moisture is not abundant. Many of our sheepmen do not know that this plant is so abundant in this country. In fact over in Oregon and Washington many sheep are grazed in the wheat fields and the plant that they gather most is salt bush. It is claimed that this feed produces wool of exceptional value, but we doubt its having any special effect in this direction. No doubt many of our ranges could be improved by the distribution of salt



Oregon Sheep Eating Australian Salt Bush

3. The principal food plant of the yellow pine forest is the buckbrush. Its two species are by far the most fattening plants on the range.

4. The principal food plant of the white pine forest is the huckleberry.

5. Under the conditions observed, the sheep never eat ferns and conifers.

6. Well managed sheep grazing is having no deleterious effect on the reproduction of the forest or of its grazing plants.

7. The presence of the sheepmen in the forest during the fire season is an assistance in fire protection.

8. The leasing system for grazing lands tends to eliminate injurious com-

ment station imported the Australian salt bush seed and made tests to see if it would survive in California. These tests indicated that the plant would thrive anywhere and this fact is confirmed by the wheat fields of all the western states. On all of the land where wheat has been raised for any length of time under the dry land method salt bush soon becomes a pest that requires much cultivation to eradicate. In all the wheat fields of Oregon and Washington this salt bush grows to perfection. In fact along most any western road the plant can be found.

In Australia salt bush furnishes more feed for sheep than every thing else

bush. On this page is shown a picture of sheep grazing salt bush in Washington.

GIVING IT BACK.

It is announced that John D. Rockefeller has just endowed the Rockefeller Institute with a million dollars for the purpose of investigating animal diseases. To this endowment J. J. Hill of the Great Northern has added \$50,000 for the same purpose. Hill's money ought to all be spent among the stockmen of Montana as that is where he got most of it, without giving very much in return.

FOR SALE



Hampshires

Any Age—Any Sex—Any Number

ADDRESS

WOOD LIVESTOCK COMPANY
SPENCER, IDAHO

F. J. HAGENBARTH, Pres.

H. C. WOOD, Manager

JOHN W. HART, Gen'l Supt.

Whether You Have 100 or 100,000 Sheep to Shear



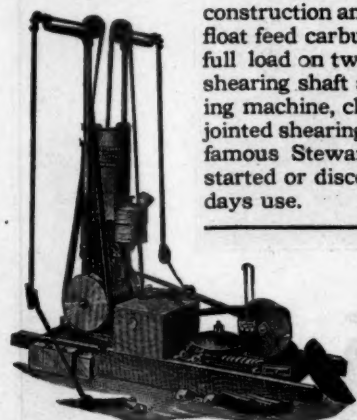
Stewart Little Major, complete. Weight, boxed, 90 pounds.

there is a Stewart Shearing Plant of just the right size to do the work. Stewart Machines, Shears and Knives are Standard of the World.

Use them and get the best results.

Stewart Little Major Sheep Shearing Outfit—For shearing flocks numbering up to 1,000 head, also ideal for one professional shearer to carry from place to place where he has work. The Little Major motor furnished with this outfit is unquestionably the best half horse power gasoline engine in the world. It has all the improvements and refinements known in small motor construction and is built with the greatest accuracy. Has high tension magneto and float feed carburetor such as used in automobile engines. Will run ten hours with full load on two quarts of gasoline. A pulley is furnished to attach in place of the shearing shaft so that the engine can be used for running a cream separator, washing machine, churn, etc. A steel arm, bolted to base of motor, holds the universal jointed shearing shaft in position and sustains its weight. The shear furnished is the famous Stewart No. 12 wide shear of latest design. The shear can be stopped, started or disconnected with motor running. This outfit will pay for itself in six days use.

Write for Little Major Catalogue.



Stewart "Little Wonder," complete. Weight, boxed, 450 pounds.

Stewart Little Wonder Sheep Shearing Outfit—For flocks of from 300 to 5,000 sheep. Has been on the market several years and is the most successful and widely used portable shearing plant in the world. Hundreds are shipped annually to sheep sections of this country, Australia, South America, South Africa, and in fact all sheep countries. The outfit consists of the highest grade two horse power gasoline engine (built in our own works), two Stewart Shearing Machines of the latest design and a power grinder. All tools and accessories are included. Although driven by the same engine, the shearing shafts operate independently and can be stopped or started while the motor is running. It is just the plant for two shearers who travel by buggy from one job to another. It's a money maker. When not shearing the engine can be used for general work. We have a special catalogue devoted to this outfit. Write for it.

Stewart Enclosed Gear Power Shearing Machines

Standard of the World

This illustration shows one of the many styles of Stewart power Shearing Plants that we install the world over. The engine is of the same construction as the Little Wonder but of greater power according to the load. We furnish the plants without engine to those who already have suitable power.

Let us send you prints of a modern shearing plant that will best serve your purpose. No obligation on your part.

Write us at once stating approximate number of sheep to be handled.



Six Machine Plant and Stewart 3½ Horse Power Engine

Chicago Flexible Shaft Company

596 LA SALLE AVENUE, CHICAGO

Wool Growing in Australia

(By R. H. HARROWELL)

HAVING decided to go in for wool growing pure and simple, that is making the production of wool the main source of revenue, and having selected the type of sheep best suited to the locality, the breeder has then to pursue a steady, consistent course, always realizing that perfection lies ahead and is almost unattainable though continued progress is surely possible. There is one principle that must be recognized in regard to the improvement in domestic live stock—there can be no standing still. The more the various breeds have been improved the more nature has been imposed

upon the wool grower to at once realize the sensitive nature of wool as a product. Wool is generally shorn at twelve months growth, so that during the four seasons of the year, there are influences at work which will be reflected for good or evil in the clip when it appears on the shearing board. It should therefore be the object of the wool grower to maintain as even a set of conditions for his flock as possible. Of course in countries where there are long snow winters the whole system of wool growing is necessarily vastly different to what prevails in Australia, and Australian experience would be of

men to devise artificial sources of water supply in as many places as possible, and so fence and subdivide their properties that the sheep could never get very far from water. This subdivision saved the sheep spending most of their time tramping to and from the water, and it also enabled wool growers to give their flocks frequent changes of pasture which are so essential to their general health. During every hour of the year the wool is growing, and the physical condition of the sheep is reflected in the staple. A period of plenty after shearing will show itself in the good sound



Sheep Range in Australia

upon, and if efforts are relaxed, she will soon revert herself, and there will be a speedy reversion to the primitive standard. Take the stud merinos of America and Australia for instance. Nature originally intended that they should carry fleeces weighing from about two to five pounds, and man by his ingenuity and intelligence has brought them up to forty pounds and even more. I mention this fact as a reminder that nature has been drawn upon to a very heavy degree, and if efforts to maintain the artificial standard are relaxed, nature will exact her revenge.

It is of very vital importance for a

very little value to sheepmen so situated, but for wool growers who depend upon the natural pastures Australian experience is likely to be of good value.

One of the main considerations in Australia is water supply. Even in the driest seasons merino sheep can hold out for a remarkably long time if they have ready access to good wholesome water. This was one of the great problems of the early days in Australia. Fencing was not heard of, and the sheep used to range over vast areas. Water was very scarce so that the flocks hovered around the water holes, and tramped the pasture in the vicinity into dust. Experience taught the sheep

growth of wool that will result, and if a bad spell comes along it will result in the growth of inferior wool so that even if a return to good seasons takes place the effect of the hard conditions the sheep temporarily suffered is permanently established in the wool, and it is taken into consideration when the buyer comes to put his value on it.

After having so improved his place as to insure the welfare of his flock as far as possible, there are other considerations to be taken into account. One of the most important is in regard to parasite pests, internal and external.

Internal parasites are very often affected by local conditions as for in-

stance fluke and lung worms. Some districts favor these complaints, while others are immune. The various textbooks give symptoms and remedies for the internal parasitical troubles in sheep, but every grower has to use his own judgment in regard to such troubles as ticks and lice. A man may go to great trouble and cost to establish a flock of high-grade sheep, he may expend a large sum of money in so improving his place as to ensure the best conditions for his sheep, but he will defeat his main object and discount all he does if he does not rid his flocks of external parasites. The torture set up by the everlasting irritation of ticks and lice debilitates the sheep, and the effect is immediately and indelibly registered in the staple, and apart from this, the rubbing and rolling sheep resort to in order to obtain relief destroys the staple and greatly reduces the value of the fleece. The wool must be kept growing throughout the year as evenly as possible so as to ensure an even staple, and this cannot be done if sheep are tortured with ticks and lice.

This brings us at once on to the subject of dipping, a subject which is so important out here that in New Zealand and in several of the Australian states sheep owners are compelled by law to dip their flocks once a year. In many parts of the Commonwealth ticks and lice are very prevalent, but in the far interior, in the very low rainfall districts ticks are rarely if ever seen though lice are steadily spreading out among undipped flocks.

From what I have read of America, I judge that the government throws great obstacles in the way of dipping by almost prohibiting the sale of some of the most efficacious sheep dips in the world, and by confining owners to the use of such ingredients as tobacco and lime and sulphur. I have no hesitation in saying that if this is so, now that the duty is removed from raw wool, all official objections to manufactured sheep dips of world wide reputation should be removed at once, and wool growers should be allowed an absolutely free hand in their choice of sheep dips. Even in those parts of

Australia and in New Zealand where compulsory dipping is in existence the governments never go as far as to prevent owners using the dipping preparations they deem the best.

Australian wool growers for considerably over a quarter of a century have banished such crude sheep dips as lime and sulphur and tobacco. They simply could not grow the beautiful wool they do if they were compelled to use such preparations. I am sure there is not a wool grower in the whole of Australia or New Zealand who uses lime and sulphur, caustic soda or tobacco as sheep dip, and it is very rarely that one hears of a sheep breeder using a home made dip of any kind. They universally use the proprietary dips of good repute. These are divided into two main classes, poisonous and non-poisonous. The poisonous dips are arsenic and sulphur, and the non-poisonous are chiefly carbolic. In the manufacture of the best arsenic dips the astringent properties of arsenic have been removed by chemical treatment, and they are exceedingly beneficial to the wool. They kill ticks and lice alive at the time of dipping and the dip particles remain in the fleece in some cases till next shearing, protecting the sheep from reinfection.

The subject is of such importance that I will deal fully with it in a separate article, giving plans of the various forms of dipping baths used in Australia and New Zealand, and the points that must be observed when conducting the operation.

I am looking forward to the files containing a detailed account of the National Wool Growers' Conference. When I get the full text of the proceedings, I may find in them subjects which I can deal with in a way that will interest American wool growers.

DIPPING.

Editor's Note.—Our Australian correspondent seems to labor under the impression that either our federal or state governments have placed some restrictions on the kind of sheep dip that a man might use. This is not the case. During the time that the govern-

ment was engaged in the eradication of sheep scabies, it was necessary that some restrictions as to the dip should be made in order that only those dips be used that might be expected to cure scabies. This was a wise policy that has been reflected in the almost entire eradication of this disease in a record breaking short time. Among those recognized were lime and sulphur and the tobacco dips, both of which were highly efficacious in the eradication of scabies. In fact more sheep were dipped in these two dips than in all others combined, and the men who used them speak highly of their curative properties. Of course, lime and sulphur was somewhat caustic and injured the wool and we never favored its use. On the other hand, the tobacco dips did but a trifling injury to the fleece in staining it slightly, but this was mostly removed before the wool was shorn, and they gave excellent results in scabies eradication, the thing we were after. However, for all private uses, for dipping for ticks, lice, etc., neither federal or state government have ever imposed any restrictions as to the kind of dip that might be used. We also should observe that sheep dips of all kinds are on the free list so that they enter without duty.

PAPER TWINE.

The secretary of the National Wool Growers' Association has conducted an inquiry to determine the amount of paper twine that is being used by western sheepmen. This inquiry reveals the fact that two manufacturers have sold this year sufficient twine to tie over 90 per cent of the fleece produced in the west. Of course these dealers sold to retailers and they may carry some of this twine over, but this amount will be offset by that carried over from last year. On inquiry at several of these retail stores we learn that they have practically sold out of twine.

We are, therefore, satisfied that about 90 per cent of all western wool will go to market tied with paper this year.

Is your subscription paid?

GRAZING ALLOWANCE ON NATIONAL FORESTS, 1914.

| Number of stock authorized Yearlong rates (Cents) | | | | | | | | | Number of stock authorized Yearlong rates (Cents) | | | | | | | | |
|---|---------------|-------|-------------|----|----|-----|------|--|---|---------------|---------|-------------|-----------|------|-----|------|--|
| Forest | Cattle Horses | Swine | Sheep Goats | C. | H. | Sw. | S&G | | Forest | Cattle Horses | Swine | Sheep Goats | C. | H. | Sw. | S&G | |
| DISTRICT 1. | | | | | | | | | | | | | | | | | |
| Absaroka | 6,056 | | 106,000 | 45 | 56 | | 13.5 | | Humboldt | 25,000 | | 316,000 | 45 | 56 | | 13.5 | |
| Beartooth | 3,925 | | 54,650 | 45 | 56 | | 13.5 | | Idaho | 1,700 | | 115,000 | 45 | 56 | | 13.5 | |
| Beaverhead | 24,670 | | 114,935 | 45 | 56 | | 13.5 | | Kalibab | 14,000 | | 5,000 | 40 | 50 | | 12 | |
| Bitterroot | 3,665 | | 39,256 | 45 | 56 | | 13.5 | | La Sal | 21,200 | | 32,172 | 45 | 56 | | 13.5 | |
| Blackfoot | 2,000 | | 5,000 | 40 | 50 | | 12 | | Lemhi | 8,000 | | 77,500 | 45 | 56 | | 13.5 | |
| Cabinet | 2,000 | | 15,000 | 40 | 50 | | 12 | | Manti | 24,442 | | 150,365 | 50 | 63 | | 16 | |
| Clearwater | 7,699 | | 149,763 | 40 | 50 | | 12 | | Minidoka | 16,500 | | 71,500 | 45 | 56 | | 13.5 | |
| Coeur d'Alene | 500 | | 25,000 | 45 | 56 | | 13.5 | | Nevada | 6,100 | | 70,000 | 45 | 56 | | 13.5 | |
| Custer | 18,000 | | 12,000 | 45 | 56 | | 13.5 | | Pallisade | 6,000 | | 99,000 | 45 | 56 | | 13.5 | |
| Dakota | 400 | | | 45 | 56 | | | | Payette | 5,100 | | 103,000 | 45 | 56 | | 13.5 | |
| Deerlodge | 14,300 | | 75,000 | 45 | 56 | | 13.5 | | Pocatello | 11,400 | | 30,800 | 45 | 56 | | 13.5 | |
| Flathead | 4,200 | | 5,000 | 40 | 50 | | 12 | | Powell | 12,500 | | 74,000 | 45 | 56 | | 13.5 | |
| Gallatin | 8,500 | | 64,750 | 45 | 56 | | 13.5 | | Ruby | 16,200 | | 33,900 | 45 | 56 | | 13.5 | |
| Helena | 18,055 | | 104,545 | 45 | 56 | | 13.5 | | Salmon | 14,700 | | 100,000 | 40 | 50 | | 12 | |
| Jefferson | 18,185 | | 131,100 | 45 | 56 | | 13.5 | | Santa Rosa | 16,500 | | 65,000 | 45 | 56 | | 13.5 | |
| Kaniksau | 1,000 | | 11,500 | 40 | 50 | | 12 | | Sawtooth | 6,200 | | 323,000 | 45 | 56 | | 13.5 | |
| Kootenai | 1,750 | | 18,265 | 40 | 50 | | 12 | | Sevier | 10,000 | | 130,000 | 45 | 56 | | 13.5 | |
| Lewis and Clark | 7,750 | | 40,800 | 45 | 56 | | 13.5 | | Targhee | 8,000 | | 122,500 | 45 | 56 | | 13.5 | |
| Lolo | 2,000 | | 25,000 | 45 | 56 | | 13.5 | | Teton | 11,100 | | | 40 | 50 | | | |
| Madison | 20,500 | | 115,400 | 45 | 56 | | 13.5 | | Toiyabe | 17,500 | | 32,000 | 45 | 56 | | 13.5 | |
| Missoula | 7,800 | | 32,500 | 45 | 56 | | 13.5 | | Uinta | 34,300 | | 259,376 | 50 | 63 | | 16 | |
| Nespece | 10,000 | | 50,000 | 45 | 56 | | 13.5 | | Wasatch | 10,400 | | 14,500 | 50 | 63 | | 15 | |
| Pend Oreille | 1,000 | | 37,200 | 40 | 50 | | 12 | | Welser | 9,500 | 500 | 85,000 | 45 | 56 | 27 | 13.5 | |
| Pelway | 5,500 | | 39,000 | 40 | 50 | | 12 | | Wyoming | 10,000 | | 196,500 | 45 | 56 | | 13.5 | |
| Sioux | 3,282 | | 3,446 | 45 | 56 | | 13.5 | | | | | | | | | | |
| St. Joe | 350 | | 58,450 | 40 | 50 | | 12 | | | | 413,092 | 900 | 3,381,146 | | | | |
| | 198,087 | | 1,333,560 | | | | | | DISTRICT 5. | | | | | | | | |
| DISTRICT 2. | | | | | | | | | | | | | | | | | |
| Arapaho | 11,350 | | 28,500 | 45 | 56 | | 13.5 | | Angeles | 4,100 | | | 50 | 65 | | | |
| Battlement | 41,000 | | | 45 | 56 | | | | California | 5,000 | 500 | 66,000 | 50 | 65 | 30 | 16 | |
| Big Horn | 32,500 | | 131,500 | 45 | 60 | | 15 | | Cleveland | 4,000 | | 500 | 50 | 65 | | 15 | |
| Black Hills | 12,000 | | | 45 | 56 | | | | Eldorado | 9,787 | 40 | 16,700 | 60 | 75 | 36 | 18 | |
| Bonneville | 10,500 | | 10,350 | 40 | 50 | | 13.5 | | Inyo | 6,000 | | 31,000 | 50 | 65 | | 15 | |
| Bridger | 15,500 | | 26,000 | 40 | 50 | | 13.5 | | Kern | 19,200 | 1,800 | 15,100 | 60 | 75 | 36 | 18 | |
| Cochetopa | 16,320 | | 62,450 | 45 | 56 | | 13.5 | | Klamath | 7,000 | 600 | 2,000 | 45 | 56 | 27 | 14 | |
| Colorado | 8,800 | | 1,500 | 45 | 56 | | 13.5 | | Lassen | 12,300 | 200 | 43,500 | 50 | 60 | 36 | 16 | |
| Durango | 12,850 | | 70,500 | 40 | 50 | | 12 | | Modoc | 39,500 | 500 | 60,000 | 45 | 56 | 27 | 14 | |
| Gunnison | 29,800 | | | 45 | 56 | | | | Monro | 4,350 | | 64,000 | 60 | 75 | | 18 | |
| Harney | 12,000 | | | 45 | 56 | | | | Monterey | 3,000 | 500 | 3,300 | 50 | 65 | 30 | 16 | |
| Hayden | 7,000 | | 120,000 | 45 | 56 | | 13.5 | | Plumas | 11,000 | | 67,215 | 50 | 60 | | 16 | |
| Holy Cross | 8,715 | | 30,300 | 45 | 56 | | 13.5 | | Santa Barbara | 11,600 | 300 | 8,000 | 50 | 65 | 30 | 16 | |
| Kansas | 12,900 | | 500 | 60 | 75 | | 16 | | Sequoia | 12,000 | 2,000 | 11,300 | 60 | 75 | 36 | | |
| Leadville | 10,503 | | 74,400 | 45 | 56 | | 13.5 | | Shasta | 8,775 | 425 | 24,525 | 45 | 56 | 27 | 15 | |
| Medicine Bow | 9,000 | | 73,000 | 45 | 56 | | 13.5 | | Sierra | 16,000 | 1,000 | 21,000 | 60 | 75 | 36 | | |
| Michigan | 700 | | 700 | 40 | 50 | | 12 | | Stanislaus | 17,000 | 300 | 6,750 | 60 | 75 | 36 | 18 | |
| Montezuma | 29,400 | | 39,650 | 40 | 50 | | 12 | | Tahoe | 7,750 | 50 | 61,600 | 60 | 75 | 36 | 18 | |
| Nebraska | 13,000 | | | 60 | 75 | | | | Trinity | 10,250 | 275 | 19,000 | 45 | 56 | 27 | 14 | |
| Pike | 18,850 | | 19,000 | 45 | 56 | | 13.5 | | | | 207,612 | 8,490 | 521,490 | | | | |
| Rio Grande | 19,500 | | 245,000 | 45 | 56 | | 13.5 | | DISTRICT 6. | | | | | | | | |
| Routt | 36,600 | | 72,000 | 45 | 56 | | 13.5 | | Cascade | 900 | | 33,000 | 50 | 65 | | 16 | |
| San Isabel | 13,700 | | 14,500 | 45 | 56 | | 13.5 | | Chelan | 500 | | 25,200 | 45 | 56 | | 15 | |
| San Juan | 12,450 | | 105,600 | 45 | 56 | | 13.5 | | Columbia | 700 | | 23,000 | 50 | 65 | | 16 | |
| Shoshone | 11,420 | | 71,150 | 45 | 56 | | 13.5 | | Colville | 5,000 | | 60,900 | 45 | 56 | | 15 | |
| Sopris | 15,365 | | 57,200 | 45 | 56 | | 13.5 | | Crater | 7,800 | 500 | 8,200 | 50 | 65 | 30 | 16 | |
| Sundance | 6,000 | 2,500 | | 45 | 56 | 27 | | | Deschutes | 3,000 | | 50,800 | 45 | 56 | | 15 | |
| Uncompahgre | 29,400 | | 56,500 | 45 | 56 | | 12 | | Fremon | 14,750 | | 105,515 | 45 | 56 | | 15 | |
| Washakie | 2,325 | | 65,000 | 45 | 56 | | 13.5 | | Malheur | 24,000 | | 130,000 | 45 | 56 | | 15 | |
| White River | 40,000 | | 8,000 | 45 | 56 | | 12.5 | | Minam | 10,500 | | 60,500 | 45 | 56 | | 15 | |
| | 499,453 | 2,500 | 1,383,300 | | | | | | Ochoco | 11,200 | | 106,500 | 45 | 56 | | 15 | |
| DISTRICT 3. | | | | | | | | | | | | | | | | | |
| Alamo | 14,000 | 50 | 13,000 | 35 | 45 | 21 | 10 | | Okanogan | 6,000 | | 75,000 | 45 | 56 | | 15 | |
| Apache | 31,500 | 100 | 81,500 | 40 | 50 | 24 | 12 | | Oregon | 2,050 | | 31,900 | 50 | 65 | | 16 | |
| Carson | 7,000 | | 169,850 | 40 | 50 | | 12 | | Rainier | 6,300 | | 48,000 | 50 | 65 | | 16 | |
| Chiricahua | 12,000 | 300 | 2,000 | 40 | 50 | 24 | 12 | | Santiam | 300 | | 24,000 | 50 | 65 | | 16 | |
| Coconino | 41,000 | 250 | 94,165 | 40 | 50 | 24 | 12 | | Slaskiyou | 4,000 | 550 | 3,000 | 45 | 56 | 34 | 14 | |
| Coronado | 21,000 | | 1,175 | 40 | 50 | | 12 | | Sluslaw | 1,200 | | 4,000 | 45 | 56 | | 14 | |
| Crook | 17,700 | 400 | 3,500 | 40 | 50 | 24 | 12 | | *Snoqualmie | | | | | | | | |
| Datil | 38,000 | 200 | 138,000 | 40 | 50 | 24 | 12 | | Umatilla | 11,400 | | 74,340 | 45 | 56 | | 15 | |
| Gila | 32,500 | 350 | 51,000 | 40 | 50 | 24 | 12 | | Umpqua | | | 12,000 | 50 | 65 | | 16 | |
| Jemez | 8,200 | | 65,500 | 40 | 50 | | 12 | | *Washington | 15,000 | 100 | 120,000 | 45 | 56 | 27 | 15 | |
| Lincoln | 9,000 | 400 | 16,000 | 35 | 45 | 21 | 10 | | Wenaha | | | 2,500 | | | | | |
| Manzano | 3,500 | | 45,000 | 35 | 45 | | 10 | | Wenatchee | 11,000 | | 103,100 | 45 | 56 | | 15 | |
| Pecos | 8,900 | | 35,400 | 40 | 50 | | 12 | | Whitman | 750 | | 77,800 | 50 | 65 | | 16 | |
| Prescott | 35,000 | 50 | 21,500 | 40 | 50 | 24 | 12 | | | 8,350 | | 113,500 | 45 | 56 | | 16 | |
| Sitgreaves | 10,250 | | 77,000 | 40 | 50 | | 12 | | | | 145,875 | 1,150 | 1,294,055 | | | | |
| Tonto | 60,000 | 100 | 675 | 40 | 50 | 24 | 12 | | DISTRICT 7. | | | | | | | | |
| Tusayan | 28,200 | 75 | 73,000 | 40 | 50 | 24 | 12 | | Arkansas | 15,000 | 22,000 | 2,000 | 35 | 45 | 21 | 12 | |
| Wichita | 4,700 | | | 60 | 75 | | | | Florida | 6,000 | 3,000 | 7,000 | 35 | 45 | 21 | 12 | |
| Zuni | 5,800 | | 50,000 | 35 | 45 | | 10 | | Ozark | 13,500 | 20,000 | 2,200 | 35 | 45 | 21 | 12 | |
| | 388,250 | 2,275 | 938,265 | | | | | | | | 34,500 | 45,000 | 11,200 | | | | |
| DISTRICT 4. | | | | | | | | | | | | | | | | | |
| Ashley | 8,000 | | 96,100 | 50 | 63 | | 16 | | ACQUISITION. | | | | | | | | |
| Boise | 4,000 | | 140,000 | 45 | 56 | | 13.5 | | Georgia Area | 860 | 430 | 1,290 | 85 | 1.09 | 50 | 25 | |
| Cache | 15,950 | | 126,700 | 45 | 56 | | 13.5 | | Massanette Area | 45 | | | 1.50 | 2.00 | | | |
| Caribou | 11,100 | | 303,000 | 45 | 56 | | 13.5 | | Wt. Mitchell Area | 950 | | 630 | 1.50 | 2.00 | 90 | | |
| Challis | 5,350 | | 81,000 | 40 | 50 | | 12 | | Nantahala Area | 1,025 | 4,000 | 400 | 1.50 | 2.00 | 90 | 45 | |
| Dixie | 16,350 | 400 | 6,500 | 40 | 50 | | 12 | | Natural Bridge A. | 120 | 500 | | 1.50 | 2.00 | 90 | | |
| Fillmore | 18,000 | | 47,000 | 50 | 63 | | 16 | | White Top Area | 1,250 | 400 | 2,570 | 1.50 | 2.00 | 90 | 45 | |
| Fishlake | 18,000 | | 72,733 | 50 | 63 | | 16 | | | | 4,250 | 5,330 | 4,890 | | | | |
| | | | | | | | | | Cattle | | | | | | | | |

WITH OUR ADVERTISERS

SHEARING PLANT FOR SALE.

F. I. Long of Great Falls, Montana, happens to have a good 14 machine shearing plant, located in a section that is fast filling with farmers. This makes it necessary to sell the plant. Notice his advertisement in this issue.

HAMPSHIRE RAMS AND EWES.

Please note in this issue the offer of Hampshire ewes and rams offered for sale by Walnut Hall Stock farm, Donerall, Kentucky. This firm has admittedly one of the best stud flocks of Hampshires in the land and is one of the few firms that are offering a considerable number of registered ewes for sale at this time. Note their advertisement on page three.

RAMBOUILLETS.

In this number will be found the new advertisement of Rambouillets offered by Craner & Goodman company of Corinne, Utah. This firm has a large flock of Rambouillets founded on ewes purchased of Kimball, and rams from the Seely flock. They offer 400 rams for this season.

SHEEP IMPORTED.

F. W. Harding, Waukesha, Wisconsin, notifies us that he will again this season make an importation of sheep from the old country. He asks that those who desire flockheaders or stud sheep notify him of their wants and he will make all importations that may be desired. See his advertisement.

HAMPSHIRE EWES FOR SALE.

The full page advertisement of the Wood Livestock company appears in this number. They offer for sale at this season any number of Hampshire ewes of any desired age. They have an immense flock of purebred Hampshires.

SHORN WETHERS.

David Dickie of Dickie, Wyoming, is advertising 1,200 head of shorn yearling wethers which he speaks of very highly. These wethers have been hay fed and will be delivered May 20th, after shearing. See his advertisement.

IMPORTING SHEEP.

Cooper & Nephews Purebred Livestock Co., Chicago, Illinois, advertise this time that they are making arrangements for the importation of all breeds of purebred sheep from England. They are anxious to now

take orders from those desiring to make importations. See their advertisement.

HAMPSHIRE AND HALF-BREDS.

The Montana Livestock Commission Company, Dillon, Montana, advertise 1,500 head of high grade Hampshire ram lambs. Also a lot of Cottswold—Merino ram lambs that are said to be unusually fine. See their advertisement.

Read the advertisement of the Inland Crystal Salt company of Salt Lake City in this issue. These people offer a sulphurized rock salt at a low price that is valuable for sheep, more so, in fact, than most of the worm powders offered on the market. Write for samples and prices.

Nearly every sheepman needs and uses an automobile in the conduct of his business. It is just as necessary as the saddle horse used to be. Now that the sheepman has an auto it is the part of wisdom to deal with a firm that handles a make of car that has proved its worth in the sheep business. The Randall-Dodd Auto Co. of Salt Lake advertise in this issue cars that will give the sheepmen perfect satisfaction.

No industry in this western country has as much need for firearms and ammunition as has the sheep industry. Shotguns, revolvers, rifles and cartridges all come within its wants. In this issue is the advertisement of Browning Bros. company of Ogden, Utah. This is absolutely the leading maker of firearms in the whole western country. They issue a large catalogue, which will be sent on request. You need this.

The advertisement of the Consolidated Wagon & Machine company appears in this number. This is an old established firm with fifty-two stores in Idaho and Utah. When you do business at these stores mention the National Wool Grower.

In the eradication of scabbies in these western states Blackleaf has played a very important part. It is still being very successfully used for this purpose wherever scab prevails. Notice the advertisement of "Blackleaf 40" in this issue.

Next to the automobile itself the tire is of most importance. Enormous numbers of tires are used by sheepmen, and they should use good ones. In the pages of this paper will be found the advertisement of the Austin Tire & Rubber company of Salt Lake City. This firm handles Michelin tires and will be glad to correspond with tire users.

ANGORA GOAT RAISING PROFITABLE IN AMERICA.

Washington, D. C.—The raising of Angora goats in the United States is now a demonstrated success according to a report just published by the United States Department of Agriculture under the title "The Angora Goat," Farmers Bulletin 573. The industry, says the bulletin, is indeed so well established here that growers need not be inconvenienced by the action of South Africa in prohibiting the exportation of Angoras, for the quantity of good blood in this country is already sufficient to meet all requirement. In the opinion of experts the best American fleeces now equal any grown in South Africa or Asia Minor, the original home of the Angora.

Although nearly every State in the Union now possesses its flocks, the southwest and the northwest are especially well adapted to the industry, in particular the large areas recently logged-off in the northwest. There the Angora not only thrives himself but helps to clear away the brush which if allowed to grow unchecked, might easily become a dangerous fire trap. Thus it is often said that the Angora works and pays for its board at the same time.

It is paying more and more, for the value of the fleece or mohair is increasing steadily. Formerly the use of mohair depended so largely upon the prevailing fashion that its price varied widely from year to year. This condition, however, is rapidly changing as new uses for mohair are continually found, from automobile tops and table covers to dress goods and curled false hair, and today the grower is assured of a reasonably steady market. The price of course varies with the quality, the very best fleeces bringing on an average of from 42 to 55c a pound. The weight of a fleece has a very wide range but in 1909 the average for Oregon was found to be 3.7 pounds and for Texas 1.85. On account of the greater heat, however, and the danger of shedding, Angoras in the southwest are frequently shorn twice a year, a fact which must be taken into consideration in all calculations.

This practice of clipping twice a year is in many ways a drawback to the industry since it tends to lower the average grade of American mohair.

Mohair as good as any, can be and is grown in this country but the average quality is not today considered to be as good as the foreign. About 2,000,000 pounds are annually imported. Ordinarily this is blended and spun with the domestic product. Six inches is the shortest length of fleece usually desired and, because of shearing twice a year, much Texas and New Mexico mohair falls below this standard. Where the fleece is allowed to grow for twelve months, the average length is 10 inches and in the best flocks it is not unusual to get 15 to 20 inches. Romeo, the sweep-

SALT BUSH.

As we are interested in developing all kinds of grasses that grow on arid lands, we publish the following extract from Bulletin 135 of the Colorado Agricultural College dealing with the subject of Australian salt bush:

"The California station made observations on the amount of rainfall necessary for this plant to make some growth, not a luxuriant growth whereby some plants obtain a diameter of 12 or more feet, but sufficient when planted in rows two feet apart to cover the ground. They state that one-fifth of an acre sown in December yielded 100 pounds of seed. This plot was cut in September, and cured for

having attained, in California, a diameter of even 18 feet.

At the California Tulare station salt bush was fed to horses, sheep, cattle and hogs. With sheep the ration was increased until some received nearly their whole sustenance for months at a time from this plant, keeping in excellent condition, and being turned off to the butcher as 'fat mutton' without any other food except a little straw."

WOOL PRICES ADVANCED.

To The National Wool Grower.

We have been offered 17 cents for our wool, but we are holding it at 18 cents, and I think we will get it. It is well grown, of excellent quality,



Stud Rams—Cunningham Sheep & Land Co., Pilot Rock, Oregon

stakes buck at the El Paso show in 1910, is an example of what is possible. His fleece weighed 18 pounds, measured 20¾ inches in length and sold for \$115. Such fleece is not of course the product of ordinary commercial conditions. It implies a considerable amount of care and personal attention.

The birth rate is approximately 65 per cent but in well managed flocks this has risen on occasions as high as 120 per cent. Since the kids are not hardy, it is obvious that this means skill and industry during the breeding season. The best methods of caring for the flock at this time are discussed in some detail in the new bulletin. Otherwise the management of Angoras does not differ greatly.

fodder, yielded at the rate of 5½ tons per acre. Three such cuttings were practicable on this light, granite, sandy loam, underlaid by hard-pan, during the driest season known. The rainfall for this season, 1897-1898, is given as 4¾ inches. The plant makes a remarkable growth with a very small water supply. The writer of the bulletin referred to states further that on unirrigated land there was no green fodder plant except salt bush in the entire region.

This plant grows on ground, not erect like alfalfa, but spreads out into a circular mass varying in diameter. Well grown individual plants in our plot attained a diameter of seven feet, but single plants are recorded as

and will not shrink over 65 per cent, if that much. A large part of the wool in the vicinity of Heppner, Oregon, has been sold at 16 cents. Mr. Wigglesworth has sold his wool from very fine ewes at 17 cents, and his one-half blood Lincoln yearling wool at 19 cents.

Stephens and Boylen have sold their one-half blood Lincoln wool at 18½ cents, and these yearlings sheared 12½ pounds. The quality and character of the wool in this section this year is the best ever known.

Conditions for crops and grass at present are excellent.

J. N. BURGESS,
Pendleton, Oregon.

BOSTON WOOL MARKET.

Commercial Bulletin.

Ohio and Pennsylvania Fleeces.

| | |
|---------------------|---------|
| Delaine washed | 27½@28 |
| XXI | 27 @ |
| Fine unmerchantable | 23½@24 |
| ½ blood combing | 24½@25 |
| ¾ blood combing | 24½@25 |
| ¼ blood combing | 24 @24½ |
| ½, ¾, ¼ clothing | 22½@ |
| Delaine unwashed | 23½@24 |
| Fine unwashed | 22 @ |
| Common and braid | 19 @20 |

Michigan and New York Fleeces.

| | |
|------------------|---------|
| Fine unwashed | 21 @ |
| Delaine unwashed | 22 @22½ |
| ½ blood unwashed | 23 @24 |
| ¾ blood unwashed | 23 @24 |
| ¼ blood unwashed | 23 @24 |
| ½, ¾, ¼ clothing | 21 @ |
| Common and braid | 19 @20 |

Wisconsin and Missouri.

| | |
|---------------------------|---------|
| ¾ blood | 23 @24 |
| ¼ blood | 23 @23½ |
| Braid | 19 @20 |
| Black, burry, seedy cotts | 18 @19 |

Kentucky and Similar.

| | |
|------------------|--------|
| ½ blood unwashed | 24 @25 |
| ¾ blood unwashed | 24 @25 |
| ¼ blood unwashed | 25 @ |
| Common and braid | 20 @ |

SCOURED BASIS.**Texas.**

| | |
|--------------------|-------|
| Fine 12 months | 55@57 |
| Fine 6 to 8 months | 48@50 |
| Fine Fall | 43@45 |

California.

| | |
|----------------|-------|
| Northern | @50 |
| Middle County | 45@46 |
| Southern | 42@43 |
| Fall free | 42@43 |
| Fall defective | 35@38 |

Oregon.

| | |
|----------------------|-------|
| Eastern No. 1 staple | 57@59 |
| Eastern clothing | 53@54 |
| Valley No. 1 | 47@49 |
| Valley No. 2 | 44@45 |
| Valley No. 3 | 39@40 |

Territory.

| | |
|----------------------|-------|
| Fine staple | 58@60 |
| Fine medium staple | 53@55 |
| Fine clothing | 55@57 |
| Fine medium clothing | 51@53 |
| ½ blood combing | 54@55 |
| ¾ blood combing | 46@48 |
| ¼ blood combing | 41@42 |

MEAT IMPORTS FOR THE WEEK

Imports of fresh beef at New York during the week ending May 2, consisted chiefly of the cargo of a vessel direct from Argentine ports, bringing something over 20,000 quarters of chilled beef and a few thousand frozen quarters, together with 7,500 frozen mutton and 4,000 frozen lamb carcasses, some frozen veal and quantities of offal and fertilizer material. There were small arrivals via England, and the total for the week was 26,477 quarters of beef, 12,261 sheep and lamb carcasses, 1,115 sides and quarters of veal, together with 6,442 cases of canned meats. This compared to last week's arrivals of 17,034 quarters of beef, 4,628 sheep and lambs, 559 quarters of veal and 1,242 cases of canned meats.

Cable advices from Buenos Aires state that total shipments of beef to this country last week totaled 11,000 quarters, compared to 4,000 quarters the week previous. The total since January 1 is given as 244,000 quarters of beef, 65,000 sheep and 32,000 lambs.—The Provisioner.

OUR WOOL BEST.

A few days ago a man who is a native of Australia, and one who has shorn sheep in that country for many years, but who for the last five years has been shearing in the United States, called at this office. Among other things he told us was that it seemed to him that our western grown wool was on an average much longer in fiber than Australian wool of the same quality and that our wool was decidedly stronger. He is a man who has had much experience and speaks with the authority of long observation.

SELLING KARAKULES

Paul McCombs, of Topeka, Kansas, is now in the northwest selling half-blood Karakule rams and endeavoring to organize a company to take up the breeding of fur bearing sheep. He has been crossing Karakule rams on Lincoln ewes and now has a great number of one-half blood Karakule rams

that are suitable for producing valuable fur when bred to coarse woolled ewes.

We have heard a great deal about the almost fabulous value of these cross-bred lambs skins, but so far all reports come from those having Karakule sheep to sell. We have no personal knowledge on the subject whatever.

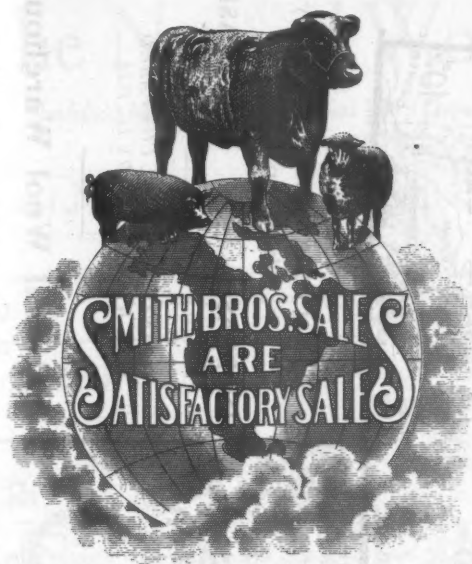
SHEEP ON SALT BUSH.

Referring to the growth of salt bush in this country Mr. Y. C. Mansfield of the state of Washington writes us as follows: "I did not cut hay off the five acres of salt bush that I pastured a thousand sheep on for two weeks, but at the end of this time there was considerable feed left. Salt bush is certainly a great sheep feed either as hay or pasture. It is certainly growing all over Utah as it grows so dense in southern Idaho that you cannot ride a horse into it. It grows in Washington on black alkali land that never before raised anything but grease wood. I am quite sure we got the seed from Utah while ordering alfalfa seed. At this time of year you can tell the plant by the under part of the leaf being dark purple.

"I am anxious for everybody to know the value of this weed as it will certainly mean much to those who would like to keep small flocks of sheep on the farm, and to the big sheepman who is looking for cheap feed."

CANADIAN HOGS TO SEATTLE.

It is reported that between January and April, more than 50,000 head of hogs had been shipped from western Canada to Seattle and Tacoma, and in addition a considerable number of cattle. This new supply source has done away with the shipping of hogs from Missouri River states to Seattle, and has also lessened the demand for Idaho and Montana hogs for coast shipments. Some feeders are blaming this Canadian stuff for the fact that nearly all the winter fed intermountain lambs went to eastern markets this winter instead of to the coast.



SHEEP SALESMEN

Whose services assure you

SATISFACTORY SALES

At Chicago

F. W. Tubbs
Geo. S. Martin

At Kansas City

F. O. Morgan
Harvey Shough

At South Omaha

M. C. Wilkerson
A. E. Compton

SMITH BROS. COMMISSION CO.
CHICAGO SOUTH OMAHA KANSAS CITY

MONEY MAKERS FOR SHEEPMEN

Stewart Shearing Machines

give you more
and better wool

They get all the wool without second cuts, the Fibre is longer and uniform in length, your clip brings a higher price and your sheep are not injured in shearing.

Kemps Branding Paint

The only brand that will scour out, and does not injure the wool. Black, Red, Green and Blue carried in stock.

Complete Line of Parts

for Stewart Shearing Machines carried in stock at all times.

Cooper's Sheep Dips

The most reliable dip.—Destroys scab ticks, lice, etc. with certainty. Its use is permitted in all official dippings for scab.

WOOL BAGS

FLEECE TWINE

THE SALT LAKE HARDWARE CO.
SALT LAKE CITY, UTAH

National Manufacturers Estimate of Shearing Sheep, April 1, 1912

| | |
|---------|-----------|
| MONTANA | 4,300,000 |
| WYOMING | 3,900,000 |
| IDAHO | 2,100,003 |
| OREGON | 2,150,000 |
| UTAH | 1,750,000 |



Local conditions indicated by figures on Map

INCREASE+ DECREASE-

JANUARY 1st, 1914, COMPARED
WITH JANUARY 1st, 1912

National Wool Warehouse
& Storage Company
CHICAGO

REPLYING to our inquires practically all of the Bankers in the States of Montana, Wyoming, Idaho, Oregon and Utah have given us their opinions as to the number of sheep in their locality January 1, 1914, compared with January 1, 1912.

We have tabulated these estimates and show the local conditions on the map reproduced herewith.

A summary of the Bankers' letters indicates a *Decrease in Sheep* in the last two years in

| | |
|---------|----------------------|
| MONTANA | of about 40 per cent |
| WYOMING | " " 20 " " |
| IDAHO | " " 10 " " |
| UTAH | " " 15 " " |
| OREGON | " " 10 " " |

An estimated *Decrease* of about 25 million pounds in the 1914 clip in these five states.

The National Wool Grower

Published Monthly by the National Wool Growers' Association Company
(Incorporated)

Published at 710 McIntyre Bldg., Salt Lake City, Utah

Edited by the Secretary

Subscription One Dollar Per Year. Entered as Second-Class Matter January, 1913, at the Post Office at Salt Lake City, Utah, under Act March 3, 1879

LONDON WOOL SALES.

The third series of wool sales opened in London on April 28. It had been predicted that wool would do well to maintain the level of prices established at the March sales. However, wool not only done this, but showed an advance in price over March ranging from 5 per cent to 7½ per cent. This would mean an increase of from 1 cent to 2½ cents per pound.

A cable to the Daily Trade Record on May 2nd, advised that Australian 64s—the same grade as our western fine staple wools—sold up to cost 65 cents clean in London.

The demand for all wool is reported as very keen and buyers on American account operating most freely. The cable also states that some advance in prices have already taken place over those prevailing on the opening day.

After the third series of sales had got well under way, prices seemed to harden somewhat. It is reported that American buyers are paying 71 cents clean for very fine Merinos; 65 cents clean for fine Merinos; 50 cents for ¾ blood; 36 cents for low quarter bloods. This is the estimated clean cost of the wools with none of the buying or importing charges added, which will bring up prices by the time the wool is landed quite a bit.

THAT ADVANCE IN RATES.

As was stated in our April number the Interstate Commerce Commission suspended the proposed advance in livestock freight rates until July 30th. We are now advised by the commis-

sion that it will hold a hearing at Sioux Falls, South Dakota, on May 18th, at which time and place evidence will be taken on the proposed advance in rates. Several livestock organizations are concerned in this matter besides the National Wool Growers' Association and all of these organizations will be represented at the hearing. Our organization is now making arrangements to present its case in connection with that of the American National Livestock Association.

RAILROAD RATES, EAST AND WEST.

Often we are asked why the livestock markets of the Pacific coast have not developed more rapidly than they have. One of the reasons that accounts for this is discrimination in railroad rates. Witness the following rates.

On the Great Northern railroad, Blair, Montana is 1,123 miles from Chicago. The rate on a 33-foot 6-inch double-deck car with a minimum of 20,500 pounds is \$112.75. From Blair to Seattle, a distance of one mile less, the rate on the same car is \$177.00 or \$66.25 more for a shorter distance going west.

On the Chicago Milwaukee & St. Paul, Saugas, Montana, is 1,093 miles from Chicago, and the double-deck rate is \$121.00. From Saugas to Seattle the distance is 4 miles shorter, and the rate is \$182.00 on the same car.

On the Northern Pacific, Tulser, Montana is 1,168 miles from Chicago, and the rate is \$121.00. From Tulser to Seattle is one mile less, and the rate is \$178.00.

On the Union Pacific, Rawlins, Wyoming is 1,109 miles from Portland, Oregon, and the rate on a 36-foot double-deck is \$200.00, but from Rock River, Wyoming, to Chicago, 1,102 miles, the rate is \$124.00.

On the Oregon Short Line, Kemmerer, Wyoming is 905 miles from Portland, Oregon, and the rate is \$150.00. But from Kemmerer to Omaha, 894 miles, the rate is \$125.00; and this Omaha rate is decidedly high.

These are just a few of the rates but they illustrate the discrimination maintained against all Pacific coast markets by practically all roads. We have no doubt that within a year the Interstate Commerce Commission will order a substantial reduction in all westbound rates as the case will no doubt be presented to that body.

EMIGRATION FROM CANADA.

At various times the press has had much to say about American farmers emigrating to Canada, but little has been told of the thousands of Canadians that emigrate to the United States. In the last six years 616,112 Americans have emigrated to Canada. During the same period, 594,919 Canadians have emigrated to the United States. This shows that for six years our total loss to Canada has been only 21,193 people, an almost insignificant number. An interesting feature of this emigration is that the number of people coming from Canada to this country is proportionately growing greater each year, and last year we gained more than we lost, 143,000 Canadians came in as against 139,000 Americans who went to Canada. However, this emigration from Canada to this country is partly made up of our own people who are coming back. Of Americans who had gone to Canada 22,832 returned in 1910; 31,432 returned in 1911; 38,317 returned in 1912; 54,497 returned in 1913. These figures show a very rapid increase in returned Americans and indicate that before long the bulk of them will have returned, and emigration will be very small. Canadian authorities claim that our emigrants, who have entered Can-

ada in the last three years, have taken with them over \$350,000,000 in cash and effects. We have no figures to indicate the amount of property or money that returned settlers have brought back with them but, since many of them had been engaged in dry land farming, it is a safe bet that they did not have much of either left.

Thousands of these returned farmers have taken up homesteads in the West, and we expect, from present indications, that many thousand homesteads will be taken by them during the ensuing season.

THE PUBLIC LAND QUESTION.

We have been advised from Washington that the author of the bill to lease the public domain has withdrawn the same from consideration of the Public Lands Committee and will not press it at this time. The Assistant Secretary of Interior, and practically all of the United States land officers in the West, condemn the bill in unmeasured terms, charging that it meant the turning over of the public ranges for all time to the sheep and cattle men, and thus denying the homesteader his opportunity. We do not agree with the supposition that a lease law would necessarily interfere with legitimate homesteading. It would, however, have stopped a lot of poaching that ought to be stopped anyway, but regardless of our attitude on the question, the bill has been disposed of for some time to come.

In lieu of the lease law the Public Lands Committee of the House have reported out and recommended for passage the Ferguson one-section homestead bill. It appears to us that this is an extremely destructive measure, and one that would harass the stockmen without doing anyone very much good. However, if congress desires to pass it, it may rest assured that practically all of the land that passes to title under it will be in the hands of the stockmen almost as soon as title is secured. This, of course, will make the stockmen's investment in lands a little heavy, but he will just have to get a little more for that

which he sells in order to compensate for his increased expenses.

Those interested in the public land question should write the Public Lands Committee of the House, and ask for a copy of the Ferguson Stock Raising Homestead bill.

The committee has also recommended for passage a resolution calling on the Secretary of Interior for the classification of the public domain. This resolution will be noted on another page of this issue.

ROMNEYS.

Mr. Jos. E. Wing of Mechanicsburg, Ohio, is secretary of the American Romney Sheep Breeders Association. We have had a great deal of correspondence with him over the Romney sheep. Now Mr. Wing made the investigation for the tariff board in South America and in that capacity came in contact with the Romney sheep under conditions similar to those existing on our Western ranges. This experience convinced Mr. Wing that the Romney would prove a most excellent sheep under conditions prevailing in his own country. He has, therefore, taken a most active interest in spreading information about this sheep among Western flockmasters.

We are not personally acquainted with the Romney, but it is indeed a noticeable fact that this particular sheep is becoming popular in those countries where crossbreeding obtains. The sheep must have some merit out of the ordinary or this would not be the case in so many different sections. We suggest that our sheepmen who are interested in crossbreeding might well write Mr. Wing relative to this new breed of sheep. He will be most glad to give any information that may be desired.

THERE'S A REASON.

Much has been written in condemnation of the methods generally employed by western sheepmen in the handling of their business. In preparing and marketing our wool, we are admittedly behind Australia, and many other countries. In far too

many instances the breeding of our sheep is not up to the desired standard. Now why should this be true? Is it because the American sheepman is less progressive or less intelligent than the man in a foreign country? Most certainly not. The qualifications of our average flockmasters is equal if not superior to that of any nation on the globe. Under Australian conditions, many of our sheepmen would be leaders there in every progressive movement. How then are we to account for this general backwardness at home?

To us it appears that the one reason is the general insecurity that surrounds our sheep industry. Men in this business have not known, and some do not now know, how long they can stay in the business. Many of them can only see from year to year, and this has been the condition for many years. Range that is used by one man to-day, may be used by another next year. Heavy snowfall or lack of snowfall may prevent the use of range that has been used for years and years by the same individuals, thus overcrowding other ranges. A single homestead judiciously located may easily destroy range for 2,000 sheep. So far as grazing for our flocks is concerned, we have no fixed rights outside of the man who uses the National Forests or the one who runs on deeded or leased range. Feed is the most necessary article in the livestock business but in our case we have no control over its supply. Such conditions do not make for progressiveness. The man, who can not see further ahead than one season, cannot make preparation for the future. Hence he continues from year to year in the same rut that has held him in the past, hoping to make the most out of things as they are. Thus we have gone along from year to year doing well if we maintained yesterday's standard.

The sheepman is generally blamed for his seeming backwardness, but he is not to blame. These conditions have been imposed on him. In no other sheep breeding country has this been true, except in Canada, and the Canadians are behind us in everything

relating to sheep. Nature imposed no hinderances on the Australian except the drouth every ten or fifteen years. He is not molested by the homesteader and he holds his land under a forty-year lease with the privilege of renewal. He knows now that in nearly all cases he will have his land for sheep a half century hence. He has never been the subject of tariff agitation that one year made wool profitable and the next year demanded mutton. It has been wool with him all along the line. His profits are enormous and he is not one whit further along than we would be under like circumstances.

However a careful review of the situation gives the future a brighter outlook than the past. Fixed rights are being everywhere established. The National Forests assure those who use them of a stability of their summer grazing. Everywhere sheepmen are buying land from homesteaders who have failed. Railroad lands are largely in private hands under sale or lease. As time passes more and more homesteads will pass into the hands of our flockmasters. These changes mean a heavy expense to the business, but they will give to it that stability and fixity of purpose that every successful business must have. The increase in expense will of itself demand a higher and better standard of flock husbandry. The sheepman will be forced to institute such reforms as will increase his income, and these reforms all lie along the path of better breeding, better feeding and a more intelligent system of marketing that which he produces.

REAL STATESMANSHIP.

Senator Kenyon of Iowa has secured a Federal appropriation of \$500,000 for the eradication of hog cholera. This disease is said to cause our farmers a loss of close to \$60,000,000.00 annually and to reduce the meat supply of the nation about ten pounds per capita. While it is doubtful if the disease can ever be eradicated, it can be and should be controlled. Senator Kenyon's part in this affair stamps him as a real statesman, and if he

never does anything else while he is in congress, he will have served the nation better than many representatives that it has had.

The agricultural appropriation bill now pending before congress makes interesting reading. Most every worthy industry is being looked after. For the first time we note in it a tiny recognition of the sheep industry; \$5,000 for an importation of Corriedale sheep. Congress has at last learned that we have in these United States a few animals belonging to the species *Ovis Aries*, but even with this discovery the recognition is small and puny.

For years and years our sheepmen have been asking for the passage of a speed minimum law, a pure fabric law and a national bounty law. All of these are worthy measures the enactment of which would constitute constructive statesmanship, but we have been given none of them. Republicans, and not Democrats are to blame for this for they have long held undisputed sway. We are wondering if the Democrats are going to do any better, or whether they too will spend their time getting appropriations for a public building at some little crossroads town, instead of enacting legislation that will be of some service in promoting the welfare of the entire community. The sheepmen will be thankful for very little for they have not had much in the past.

WANTED, A LONDON MANAGER

We have before us a copy of the London Daily Mail of March 6th, which contains a large advertisement of the American Woolen Company of Boston. This firm is advertising for a manager for its London office. Among other things the advertisement recites that. "The recent removal of the tariff on wool in the United States enables the company to offer their fabrics for use in all parts of the world."

We have no doubt that the American Woolen Company can sell some woolen goods in London in competition with English made goods, but if it can it will have considerable difficulty in ex-

plaining to congress why it needs a duty of 35 per cent on all manufactures of wool to protect it against imported wools, chiefly made in Great Britain. However, if its success in selling woolen goods abroad depends upon the reason assigned in this advertisement then it is doomed to dismal failure. This tariff on wool never prevented the exportation of one yard of American made goods. Under all tariff laws 99 per cent of the tariff paid on imported wool was remitted on all goods exported that was made out of imported wool. Under this provision the American Woolen Company could import 1,000,000 pounds of wool, make this into cloth, and if the cloth was exported, the government remitted 99 per cent of the tariff paid on the wool. The skulduglery that could be practiced on the government by substituting our wool, for imported wool, under this provision made the American Woolen Company much better off under the old tariff than under the new. So much for American goods that are made of imported wool. Now as to goods made of domestic wool. If the removal of the tariff has given the American Woolen Company any advantage over the foreigners in the foreign market then it is either because American grown wools are superior to any wools now used by the English manufacturer or else the American Woolen Co. is buying our wools at a lower price than similar wools cost the English manufacturer abroad. We ask the American Woolen Company to advise the public which of these reasons is the correct one as permitting their invasion of the foreign market?

A FINAL WORD.

Shearing season is nearly over but let us again call attention to some rules of shearing that we have been urging through this paper for four years.

Keep the shearing shed scrupulously clean.

Do not shear wet sheep.

Pack all tags separately and throw heavy dung locks away.

Under no circumstances allow black wool in the same sack with white wool.

Pack ewe wool in separate sacks. Do the same with buck wool and yearling wool.

Tie each fleece with paper twine.

If possible grade your sheep before shearing, or better grade the wool after shearing, into the different grades.

Turn the sack inside out and shake it well before filling.

Mark each sack plainly so as to show exactly the kind of wool it contains and keep a record of the number of each kind of sacks.

When you offer the wool for sale offer it for exactly what it is.

The observance of these rules will bring the hearty commendation of the manufacturer and they will in no wise increase your expense. In the absence of a better system every wool grower should adopt them.

AMUSING TO SAY THE LEAST.

In connection with the efforts of the railroads to advance their eastbound rates on livestock we notice by the new tariffs that in very many instances these tariffs show a reduction in the rate on horses and hogs from Utah, Idaho and Wyoming points to eastern markets while they show an increase in the rates on cattle and sheep. Those acquainted with the facts know that there is no movement of hogs at all from these states to eastern markets and only occasionally is there a shipment of horses. The movement is in 98 per cent of the shipments either sheep or cattle and on these the rates have been advanced. The reduction has been made on a traffic that does not exist.

OUR BEST CROP.

The news of a large corn or wheat crop is heralded all over the world, but the failure or abundance of a grass crop scarcely receives passing notice. The public takes no interest in it as only the stockmen know the true value of grass to the world.

Seldom do we consider the wonders of grass. Up and doing in the spring time almost before the mantle of snow has withdrawn its forbidding chill from

off the earth; a sunshiny day in March, a sleety rain in earliest spring awake it from its seeming sleep, and forthwith its tiny shoots of green are pushed up into a busy world, to grow and grow until the dictates of nature in another season demand that it cease its labors for the time.

Little it requires to comfort it. In almost every kind of soil grass finds something upon which to sustain its growth. Low down in the valleys on sour, putrid soil, deluged with moisture; out on the arid, wind-swept plains; far up the mountain side beyond the timber line, grass, in some form or other, finds lodgment and life sustaining elements. And so it is, not only here, but everywhere over the earth's surface. Grass, grass everywhere and few to appreciate or admire. What a forbidding place the earth would be without it, bleak, bare, repulsive, yet in its presence seldom do we stop to admire or turn a hand to favor its propagation. It is worth more to the world than all other crops combined. Not only is it nature's feed for all domestic and wild animal life, but it makes all other crops possible by enriching the soil, retaining moisture and preventing erosion. It is all crops in one, for it gives life to all.

How often has the public or the stockman stopped to consider their abject dependence on grass, or how often have our agricultural colleges tried to make two blades of it grow where only one grew before. If we all understood what grass means to us, we fancy the stockmen would begin to graze it a little later in the spring; would make a little more allowance for reseeding, and the sheepmen would no doubt adopt a looser system of herding his flocks. If the farmer understood, he would be less hasty with his plow and his pastures would be smaller and more numerous and then some of the fertilizer that now all goes to the grain crop would be given to the grass meadow.

Let us now in the midst of a new spring time resolve to be more careful of this, nature's greatest crop.

SAVING MONEY ON MEAT.

Probably the consumer is more interested in reducing his meat bills than any other item for food. Recently the U. S. Department of Agriculture issued a bulletin which tells of the high food value and cheapness of various cuts of lamb and mutton, and gives 50 recipes for cooking these, so that the housewife can make a variety of dishes and use them with the greatest economy. Any one who will send a postal card to the Department of Agriculture and ask for Farmers' Bulletin No. 526, will receive free this valuable publication on meats.

TWENTY-EGHT-HOUR FINES.

Because it confined live stock in cars for more than twenty-four hours without unloading for feed, water and rest, the Wabash Railroad Company in Indiana has had two penalties of \$100 each imposed for two distinct violations of the twenty-eight-hour law. The fines also covered the costs, which amount to \$16.10 in one case and \$12.10 in the other.

CATTLE PRICES.

From the Pastorial Review we have the prices of fat cattle in South America and Australia.

In Argentine prime steer weighing 1,400 to 1,550 pounds sell at \$70.00 to \$75.00.

In Australia prime steers 1,200 to 1,300 pounds sell at \$45.00 to \$55.00.

In Chicago these same steers would bring around eight cents per pound.

SHEEP DECREASE IN ILLINOIS.

To The National Wool Grower.

There is not over 25 per cent as many sheep in this county as there was a year ago. The drouth and free wool scared them out. Our spring lamb crop is good. No wool has been sold yet. Dogs are a great drawback. More dogs in this township than sheep.

L. F. BRISSENDEN,
Flora, Illinois.

WM. R. (Bill) SMITH

J. CLARK EASTES

JOHN SMITH

WM. R. SMITH & SON SELL

“Nothing But Sheep”

Recognized Leaders In Successful Salesmanship

CHICAGO

SOUTH OMAHA

T
H
E

K
I
N
D

Y
O
U

N
E
E
D



T
H
E

K
I
N
D

W
E

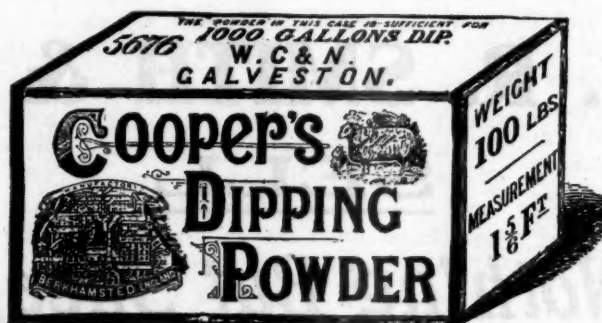
B
R
E
E
D

KNOLLIN & FINCH SHROPSHIRE RAMS

You will want to **top** the market with **your lambs** next year and **Shropshire rams** will help you to do this. The **Knollin & Finch Shropshire rams** produce market **toppers**. We are now booking orders for our **Shropshire rams** for next fall delivery.

KNOLLIN & FINCH, - Soda Springs, Idaho

A CASE OF GOOD DIP



THE ONLY DIP THAT KILLS ALL TICKS WITH ONE DIPPING

**Destroys Both Live Ticks and Nits or Eggs—
Prevents Fresh Attacks—
Improves Quality of Fleece—
Increases Quantity of Wool—
Destroys the Maggot Fly.**

Cooper's Dip Is Used On Over 260,000,000 Sheep Annually

**Be Sure It's Cooper's—Then Dip
Sold Everywhere**

SOLE PROPRIETORS AND MANUFACTURERS

WILLM. COOPER & NEPHEWS Chicago, Ill.

For Branding

Use **Kemp's** Australian Branding Liquid—the
Recognized Standard. Scours Out.

The Sheep Market

(By J. E. POOLE)

MAY found sheep trade sentiment more optimistic. April needed the services of an apologist, but when weight of offerings was considered it was not a bad market. The month's receipts at Chicago were 400,204 head, which established a new record while supply of the first four months of the current year aggregated 1,803,621 or 309,406 more than in 1913. During these four months sheep and lamb supply at the six principal western markets, Chicago, Kansas City, Omaha, St. Louis, St. Joseph and Sioux City aggregated 4,052,000 against 3,550,000 in 1913, 3,870,000 in 1912 and 3,390,000 in 1911. Shipments were of record on April proportions, the outlet for both fat and feeding stock on shipping account being wide open practically all month. Practically one-fourth of the month's receipts found the shipping outlet; bulk of them going East on killing account, but everything available that was suitable for the feeder outlet found a hungry demand. Shipments of sheep and lambs from Chicago during the first four months of the year aggregate around 465,000, more than 122,000 over like period last year and a new yard record.

As predicted a month ago, the April sheep and lamb market was on a higher general basis of prices than that of March. The average price of fat lambs fell to \$7.40 for the month, against \$7.65 for March, owing to the greatly increased proportion of shorn

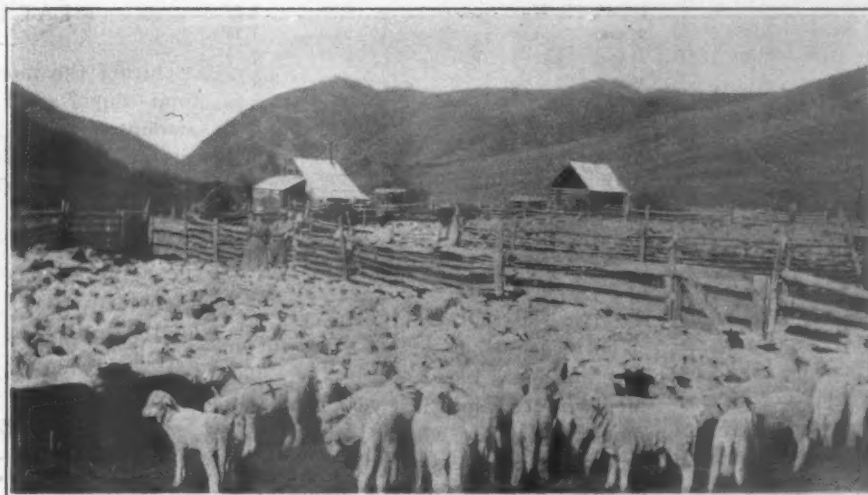
stock in the run, but a 10c higher top on woolled lambs was made than in March and it stood the highest since July last, although 75 cents below April, 1913, and \$2 below the record open market price hung up in May, 1912, and in March, 1910, when \$10.60 was paid. A spread of \$7.75@8.50 took the bulk of the month's woolled lamb supply of which Colorados formed probably 90 per cent, while the bulk of the April shorn lamb crop sold at \$6.35@7.00. The extreme top on woolled lambs was \$8.60, reached by a good many Colorados between

cornbelt territory also tired of nursing the market and Montana practically cleaned up its hay-fed stuff though some was still left at the big feeding stations around Chicago at the month end for a grain finish, after shearing.

The sheep end of the trade gave a good account of itself during the first 20 days of April, but showed sharp declines thereafter, when market breaking Texas grassers showed up freely at southwestern points. The latter never came better and they were numerous enough to more than offset scarcity of grain fed sheep. A general

average of \$6.10 was made on matured muttons, however, for the month, 20c higher than March and 35c below April 1913. It was the highest sheep market, however, since April of last year. Fancy heavy woolled wethers of the Clark & Fox, Wisconsin feeding reached \$7.20 on the 14th. Wethers of the same feeding

hold the yard record of \$9.30, paid in March, 1910. No aged shorn wethers passed \$6.15. Colorado Mexican woolled yearlings topped at \$7.50 and fed western shorn yearlings at \$6.75. One band of 12,000 of the D. B. Zimmerman, Minnesota fed shorn yearlings was marketed during the month at \$6.00@6.35, otherwise yearlings were scarce. A few heavy woolled native ewes touched \$7.00 and shorn as high as \$6.00. A spread of from \$5.35@6.00 took the bulk of the shorn sheep and ewes and woolled sold largely between \$5.85@7.00.



Docking Lambs at Shields & Stockings, Sandy, Utah

the 15th and 20th, while fall shorn lambs sold as high as \$7.75 and fresh shorn topped at \$7.30.

Shipping demand was a stout support to the market which, supply considered, acted creditably although not living up to the expectancy of some of the bulls who had visions of a \$9.00 woolled and \$8.00 shorn lamb market developing.

Colorado feeders showed a decided inclination to crowd the market hopper and reported not to exceed 30,000 head of their heavy winters feeding back at the month-end. Feeders in

Sheep closed at the month's lowest levels and wooled lambs of top class within 10c to 15c below the extreme low point. At the finish best wooled lambs were 10c to 15c below the closing basis of March, shorn lambs largely steady, yearlings 10c to 15c lower and sheep 25c to 50c lower, wethers showing the most decline. Only a few odd bunches of spring lambs of the new crop appeared and 14c was paid in the pre-Eastern trade, but 10c took choice at the close. Scarcity of spring lambs was a pronounced feature, in fact natives of any age were in remarkably small supply. Packers received a few loads of southern springs direct, and a free movement of Tennessee and Kentucky spings marketward is promised by May 20, the crop being reported about two weeks earlier than last year, but deficient in numbers. Some of them have been contracted for June and July delivery at 7c.

Demand for feeding and shearing stock was good and bulk of the lambs bought on country account sold from \$7.00@7.35, with fleshy shearing classes ranging upward to \$7.50@7.60 at high time very few sheep were taken on feeding account.

The May market is expected to be productive of a shorter supply of fed lambs and grain fed sheep than arrived in April, good runs of Texas grass muttons, during a part, if not all the month and of a very material swelling in the supply of spring lambs after mid-month. With Colorado well cleaned up the outlook is not considered at all unfavorable for a good market, particularly on lambs. The sheep end of the trade will depend on Texas and if that supply source fails to provide a good many grass muttons, sheep too may be expected to recover some of their recently lost ground. California is due to start some spring lambs marketward this month and a little Arizona stuff of the new crop has already reached Kansas City.

Monthly average prices follow:

| Sheep | 1914 | 1913 | 1912 | 1911 | 1910 |
|-------------|--------|--------|--------|--------|--------|
| January ... | \$5.40 | \$5.20 | \$4.25 | \$4.10 | \$5.35 |
| February .. | 5.65 | 5.85 | 4.10 | 4.15 | 6.50 |
| March | 5.90 | 6.35 | 5.30 | 4.70 | 7.60 |
| April | 6.10 | 6.45 | 5.90 | 4.20 | 7.60 |

Lambs

| | | | | | |
|-------------|------|------|------|------|------|
| January ... | 7.70 | 8.55 | 6.50 | 6.20 | 8.30 |
| February .. | 7.60 | 8.55 | 6.20 | 6.95 | 8.65 |
| March | 7.65 | 8.00 | 7.30 | 6.10 | 9.40 |
| April | 7.40 | 8.40 | 7.80 | 5.50 | 9.10 |

Monthly top prices follow:

| Sheep | 1914 | 1913 | 1912 | 1911 | 1910 |
|-------------|--------|--------|--------|--------|--------|
| January ... | \$6.30 | \$6.50 | \$5.10 | \$4.75 | \$6.60 |
| February .. | 6.50 | 7.00 | 5.00 | 4.85 | 7.85 |
| March | 7.00 | 7.50 | 6.50 | 5.60 | 9.30 |
| April | 7.20 | 7.90 | 8.00 | 5.25 | 8.50 |

Lambs

| | | | | | |
|-------------|------|------|-------|------|-------|
| January ... | 8.40 | 9.50 | 7.40 | 6.65 | 9.10 |
| February .. | 8.10 | 9.25 | 7.15 | 6.50 | 9.40 |
| March | 8.50 | 9.15 | 8.25 | 6.65 | 10.60 |
| April | 8.60 | 9.35 | 10.40 | 6.60 | 10.20 |

Weekly average prices follow:

| Week Ending— | Sheep | Lambs |
|-------------------|-------|-------|
| January 10 | 550 | 7.95 |
| January 17 | 5.40 | 7.70 |
| January 24 | 5.50 | 7.65 |
| January 31 | 5.50 | 7.65 |
| February 17 | 5.45 | 7.50 |
| February 14 | 5.50 | 7.55 |
| February 21 | 5.55 | 7.55 |
| February 28 | 5.95 | 7.80 |
| March 7 | 5.80 | 7.55 |
| March 14 | 5.80 | 7.60 |
| March 21 | 5.85 | 7.50 |
| March 28 | 6.15 | 7.90 |
| April 4 | 6.20 | 7.50 |
| April 11 | 6.25 | 7.35 |
| April 18 | 6.20 | 7.50 |
| April 25 | 5.95 | 7.40 |

SHEEP IN IOWA.

To The National Wool Grower.

There is about the same amount of breeding ewes here as last year. The men who fed lambs last year lost some money but those who fed ewes made money. As feeders we like a smooth necked, medium wooled lamb. The weight does not matter so much if we can get good quality. Most of the feeders here only feed one or two double decks. There will be about 150,000 pounds of wool to sell here.

M. I. SHAFROTH,
Corning, Iowa.

QUITTING SHEEP.

To the National Wool Grower.

I have been a member of the National Wool Growers' Association since its re-organization. You will please find enclosed \$5.00 to pay my dues to the association for the year 1914. I must inform you that I am practically out of the sheep business and will start in other

business pursuits this fall, so this will be my last subscription to the National Wool Growers' Association.

Wishing the association the best of success.

R. B. THOMPSON, Montana.

PREMIUMS OFFERED.

The Live Stock Exhibit at the Panama-Pacific International Exposition at San Francisco in 1915, at which all the great cattle and stock raising nations will display, will cover 65 acres. \$175,000 has been set aside by the Exposition management for premiums and prizes for live stock, and the sum of \$47,000 has been raised by breeders' associations in the United States and abroad.

MEAT IMPORTS.

During the month of February the total imports of all kinds of meats amounted to 17,360,000 pounds. Of this amount 15,001,576 pounds were beef and 1,610,000 pounds of mutton. The balance was pork and meat products. The total imports of meat for the eight months ending with February amount to 68,374,000 pounds. These figures do not include live animals imported.

WILL FEED AGAIN.

To The National Wool Grower.

There are less sheep here than there were a year ago. Wool is selling from 15 to 22 cents. Our lamb crop is about as usual.

There was no money made feeding sheep last year. They will feed again this year. The western medium lamb is the best feeder. Lambs between 60 and 65 pounds are preferred here.

SLINGER & SON,
Cambria, Wisconsin.

If you are going to consign your wool it will be best to look through this paper and consign to some firm that advertises here. We will try to carry only the advertisement of reliable firms.

TO SAVE DROWNING SHEEP.

To The National Wool Grower.

Permit me to outline a newly perfected method of resuscitating sheep that have either been overcome by heat or partly drowned through the process of dipping.

It has in the past been the practice to apply a quantity of cold water to the head and produce artificial respiration by means of intermittent pressure applied to the chest wall. While this method had its worth, it failed to revive a number of partly drowned sheep.

While dipping last week at Juntura, Malheur county, Oregon, we found a new method that seems to be

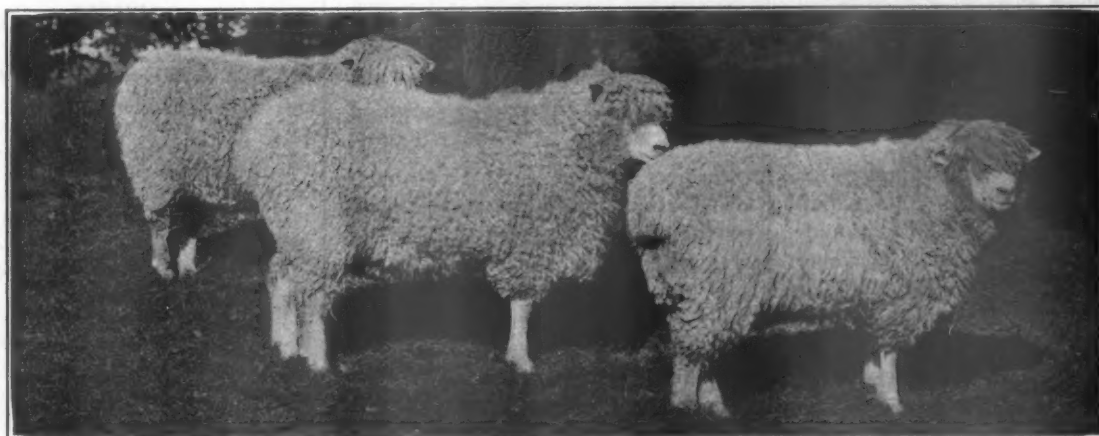
method. We did not record a single failure to revive with this method whereas by using the old method we lost the only two that we attempted the treatment upon.

It is possible that this method of centrifugal resuscitation could be advantageously applied to partly drowned people, and might be an easier method of freeing the lungs of water than the practice of rolling them over a barrel. We found it possible to swing large ewes in a centrifugal manner about the body of the holder though it is evident that it would take at least two men to swing in this manner a person of any considerable size.

We are dipping some 300,000 sheep in parts of Oregon this year largely on

sults. The breed or type used must depend very largely upon two factors, one of which is the adaptability to the local or special conditions, and the other the question of personal preference.

If early lamb production is desirable, selections must be made from the breeds best adapted to that purpose. If specialization in mutton production is desired, suitable types from this class must be chosen. If sheep must necessarily be used on pastures consisting of rough, cut-over lands where exposure to inclemencies of the weather is inevitable, then a type should be chosen with close compact fleece not subject to injury from snags, brambles, etc., and which will exclude snow.



Cotswold Rams Owned by F. W. Harding, Waukesha, Wisconsin

far superior to the old measures used in this connection. Partly drowned lambs and grown sheep were grasped by the hind legs, face downward and swung about the holder in a centrifugal manner. By means of the centrifugal force the water was driven quickly from the lungs and any blood that had rushed to the internal organs, while the sheep was in the hot dipping solution, thus causing an anemic condition in the brain and consequent fainting, due to nature's efforts toward attempt prevention of overheating; was quickly again forced back to the brain and resuscitation was quickly brought about. We used applications of water to the head in some instances in conjunction with the centrifugal

account of ticks, and in the course of a few years there will be without doubt annual dippings for this pest until the same is eradicated.

W. H. LYTLE,
Salem, Oregon.

THE SOUTH NEEDS SHEEP.

The south is not producing all the wool that it should produce. It is not reaping the benefits that would come to it in marketing early lambs. But above all perhaps, in this connection, is losing the advantage of sheep raising as an upbuilder of the soil.

The question of breeds and types is one, the discussion of which ordinarily does not produce satisfying re-

sults. The sheep is frequently spoken of as a scavenger, but in no sense of the word is this true, for they are the daintiest feeders of all farm animals. The term "scavenger" has been applied probably through the weed eating propensities of the sheep as they are known to feed on somewhat over six hundred different kinds of weeds. In methods of weed control the sheep is the most efficiency agency the farmer can employ.

The sheep is one of the most economic producers among farm animals, as they are adapted to the utilization of waste and by-products. Aside from the staple produced on nearly every farm there is more or less herbage growing in by-places, such as fence

bottoms, lanes, yards, etc., which must be an entire loss unless utilized by some kind of live stock. It is much better economy to utilize the products of by-places by means of sheep, thus converting waste material into wool and mutton, than to spend labor in trimming the grass and weeds in such places and receive nothing in return.

From the standpoint of the maintenance of fertility, the universal production of sheep would be a great boon to the South. This is particularly true because of the wide range of forage crops that can be grown, which are available throughout such a large portion of the year, including both winter cereals and legumes.

Sheep are particularly desirable as foragers for the reason that their excreta are more universally distributed than in the case of horses and cattle.

Because of the great possibilities from a forage standpoint, mutton and wool should be produced cheaply in the South.

Economic mutton production is practically assured in a State where leguminous crops are grown in abundance along with corn and available supplies of cotton seed meal.

For further information apply to
F. L. WORD, Atlanta, Ga.

PORTLAND SHEEP MARKET.

The local mutton and lamb markets are holding fairly steady at present and have not undergone much change since mid April. Grass stuff is offered more freely as hay fed stock becomes scarcer.

Demand for ewes and wethers is a shade better than for lambs. April receipts totaled 16,660 head compared with 14,630 for April, 1913, or a gain of 2,030.

Liquidation at present is rather slow, due to the period between hay and grass stuff. Fed stuff has been practically cleaned up and the bulk of stuff from now on will be grass sheep, which naturally sell lower than grain fed mutton.

Some arrivals of valley sheep for the past week on the market, $4\frac{1}{2}c$ for fancy ewes weighing 115 to 130 pounds

lighter weights finding ready sale at $35c$ to $40c$ higher. Heavy aged wethers $5\frac{1}{4}c$ to $5\frac{1}{2}c$. Light weights and yearlings commanding $25c$ to $60c$ more than aged stuff. Some very choice spring lambs have been arriving. Those averaging 40 to 60 pounds, finding an outlet at $7\frac{3}{4}c$ to $8c$, over 60 pounds, $7\frac{1}{4}c$ to $7\frac{3}{4}c$.

FINE WOOL SCARCE.

We talked with a wool buyer the other day about wool and he said. "Yes I know where I can buy plenty of one-fourth blood and coarse wool, but tell me where I can get fine Merinos and high cross-breds. Those are the wools that our mills are crying for and it looks as if the demand would have to be satisfied from abroad. What have you done with your fine sheep out here anyway?"

LIVESTOCK LOSSES.

Farmers Bulletin number 590 from the department of agriculture deals with the annual losses of livestock. It states that during the past year the losses of hogs from disease has been 119 out of every thousand. The losses of cattle from disease has been 19.8 head, and from other causes 10.9 head, per thousand. The loss of sheep from disease is reported as 21.7 head, and from other causes 21 head, per thousand.

APRIL RECEIPTS OF SHEEP.

Sheep receipts at the principal western markets in April and the four expired months of 1914.

| April— | 1914 | 1913 | |
|-------------------------|-----------|-----------|----------|
| Chicago | 400,204 | 359,387 | +40,817 |
| Kansas City .. | 231,545 | 180,812 | +50,733 |
| Omaha | 178,168 | 180,513 | -2,345 |
| St. Louis | 48,200 | 48,611 | -411 |
| St. Joseph .. | 100,995 | 74,395 | +26,600 |
| Sioux City .. | 15,645 | 8,636 | +7,009 |
| Totals | 974,757 | 852,354 | +122,403 |
| Fourth Months Receipts— | | | |
| | 1914 | 1913 | |
| Chicago | 1,803,621 | 1,494,135 | +309,486 |
| Kansas City .. | 683,332 | 652,111 | +31,221 |
| Omaha | 877,335 | 755,360 | +121,975 |
| St. Louis | 199,038 | 219,384 | -20,346 |
| St. Joseph .. | 352,497 | 276,047 | +76,450 |
| Sioux City ... | 127,056 | 52,230 | +74,826 |
| Totals | 4,042,879 | 3,449,267 | +593,612 |

Officers of National Wool Growers' Association

- F. J. HAGENBARTH, President
Spencer, Idaho.
A. J. KNOLLIN, Eastern Vice-President
Chicago, Ill.
M. I. POWERS, Western Vice-Pres.
Flagstaff, Arizona.
F. D. MIRACLE, Treasurer
Helena, Mont.
S. W. McCLURE, Secretary
Salt Lake City, Utah.

Executive Committee

- ARIZONA.**
Hugh Campbell, Flagstaff.
CALIFORNIA.
F. A. Ellenwood, Red Bluff.
COLORADO.
L. R. Thompson, Las Animas.
IDAHO.
Nathan Ricks, Rexburg.
IOWA.
V. G. Warner, Bloomfield.
KENTUCKY.
W. T. Chilton, Campbellsburg.
KANSAS.
E. E. Hazen, Hiawatha.
MICHIGAN.
A. A. Wood, Saline.
MONTANA.
E. O. Selway, Dillon.
NEBRASKA.
Robert Taylor, Abbott.
NEVADA.
A. E. Kimball, Elko.
NEW MEXICO.
H. C. Abbott, Mount Dora.
OHIO.
S. M. Cleaver, Delaware.
OREGON.
M. B. Gwinn, Crowley.
TEXAS.
B. L. Crouch, San Antonio.
UTAH.
Thomas Austin, Salt Lake City.
VERMONT.
E. N. Blissell, E. Shoreham.
WASHINGTON.
F. M. Rothrock, Spokane.
WEST VIRGINIA.
S. C. Gist, Wellsburg.
WISCONSIN.
Arthur Stericker, Manitowoc.
WYOMING.
Joseph Kinney, Cokeville

WHY NOT LINCOLNS?

I have read very few endorsements of the Lincoln sheep in the pages of any sheep paper in this country and I think this is entirely because the sheep men do not understand the merits of the Lincoln. I know that the average sheepman does not know the difference between a Lincoln and a Cotswold and many of them refer to all long woolled breeds as Cotswolds. Then again in certain sections you hear it said that the Lincoln is not as hardy as the Cotswold, but I am at a loss to understand how these men know this fact when very few of them have ever given the Lincoln a trial. In Idaho we have one owner who has a very large flock of Lincolns and Cotswolds. They run in the same flock most of the year, except at breeding time. Now the only difference between the Lincoln and Cotswold in this flock is that the Lincoln is a shade larger and has a little heavier fleece than the Cotswold. One is just as hardy as the other and just as sniffly at the nose as the other.

In the old country the Lincoln is given the credit of producing the heaviest fleece of any of the long wools and also it is the largest of the long wools. Lincoln wool is classed as lustre wool and while it is coarse there is much demand for it.

For cross-breeding every country except the United States gives the Lincoln first place. It is the one successful coarse woolled sheep in use in the Argentine. It has held the same position in New Zealand. In fact it may be truthfully said that outside of the United States it is the sire of more cross-bred sheep than all other coarse woolled breeds combined. I am not underrating the value of other coarse woolled breeds. All of them are more or less alike. They all come from Great Britain and that means that there is relatively little difference between them. In fact in that country there are some seven or eight of these coarse woolled breeds where there only ought to be about four. It takes less to establish a new breed of sheep in

England than anywhere in the world. They have something like forty different breeds, many of which are only strains of the same breed. Many of these so-called English breeds depend for their virtue upon some chimerical or mythological foundation. In this respect the coarse wools did not escape. The Lincoln however, happens to be one of the oldest breeds, and is generally credited with being the largest of all the breeds, except the Roscommon, which is merely a variation of the Lincoln. It is this size that we are after.

The man who is making money out of lambs is the man who is getting weight. The Blackfaced ram to a half-blood Lincoln ewe gives the weight. Probably the highest priced lambs sold off the range last year were $\frac{3}{4}$ blood Cotswolds. Why, because they had the weight. A bunch of $\frac{3}{4}$ blood

Messrs. HICKMAN & SCRUBY, Court Lodge, Egerton, Kent, England

Exporters of Pedigree Livestock of All Descriptions

Illustrated Catalogues, and References on Application

We live on the spot, and ship direct to our clients, and the commission we charge for buying amounts to less money than the cost of a trip to this side. Horses, cattle and sheep can be bought cheaper through us than by any other method.

We live in the heart of the Romney country and can supply breeding stock of this favorite breed to the best advantage.

SHEEP Bought and Sold

RANGE LAMBS ALSO HANDLED

Arthur A. Callister

Melatype Bldg., Salt Lake City, Utah

FOR SALE!

SHORN WETHERS

1200 yearling wethers for delivery May 20th at Worland, or Kirby, Wyoming. These wethers have been hay fed and are in good condition.

Price \$3.60

DAVID DICKIE

DICKIE, WYOMING

Have you a new subscriber for us?

COOPER'S SPECIALS FOR MAY

MR. RANCHMAN place your order NOW (for delivery, now or later,) for what Rams and Ewes you are likely to want. One of our specialties is that of supplying the Western men with what they need, which we have been most successful in doing. Send for particulars of HAMPSHIRE, SHROPSHIRE, OXFORDS, COTSWOLD, etc., now available.

MR. HIGH CLASS BREEDER: We already have sheep bought in England and expect, as usual, to import many of the best for our clients in North America.

SHEEP IMPORTED by us in the last 7 years have won some 4,000 prizes and championships. We can bring you what you want, subject to your approval at Sugar Grove, before settling for them. We protect our customers in every way and furnish the best at most reasonable prices.

WM. COOPER & NEPHEWS P. S. CO.

64 W. Illinois Street, CHICAGO, ILL.

Farm at Sugar Grove (Near Chicago) O. B. & Q. R. R.

Cots weighed 88 pounds, and sold for 6¾ cents, bringing \$5.94. A bunch of ½ blood Hamps, a little younger, weighed 70 pounds and sold at 7½ cents, bringing \$5.25. It will be said that the Cotswolds did not carry as good a quality of meat. This is true and they got docked ¾ cents per pound, and still made the most money. Of course the test was not fair to the Hamp as he was younger, and came from another range, but the point we are making is, that weight is what we are after. The Lincoln being the largest sheep stands to give that weight to his offspring and the breed should not be condemned by men who have never used it or saw it used.

C. X. JENES.

HIGHLY PROFITABLE FARMS.

Farm management surveys are now being conducted in a good many localities in this country. In nearly all of them it has been found that from 2 to 5 per cent of the farmers are making very handsome incomes. A study of these highly profitable farms with a view to finding wherein they differ from ordinary farms brings out some very interesting relations.

The farms may be divided into three classes. One class consists of highly specialized farms, where the farming is not only of the most intensive character but is of large magnitude. Highly successful farms of this class are found only in those localities that possess distinct advantages in the matter of markets for perishable farm products or very distinct advantages in the matter of soil and climate.

Another class consists of farms producing products of exceptional quality. They are mainly farms on which very high-priced live stock are produced. These farms are scattered more or less throughout the country and are not numerous anywhere. There is, in fact, not room for a large number of such farms in any section.

The third class consists of farms that are organized on the basis of standard field crops and the ordinary types of live-stock farming, but which

are both very large and very well managed. It is this latter class of farms which appears most commonly in the Middle West, where there is not room for very many highly specialized farms. In New England fruit and truck farms, as well as farms devoted to the production of the highest class of breeding stock, stand out very prominently amongst the highly profitable farms.

While the highly specialized farm represents the possibility of great profit, it frequently also represents the possibility of heavy losses on account of the tremendous fluctuation in production, and consequently in prices, of the products of intensive farming. In the greater portion of the country the great mass of farmers must gain their livelihood from the ordinary field crops and the common types of live stock. The surveys clearly demonstrate the fact that in general farming the size of the farm is a very important factor. The farm should be large enough to give the working force available to the farmer a maximum of productive labor throughout the year.

MIXED GRASSES.

The Utah Experiment Station recommend that for pasture on bench lands under irrigation the following mixture of grasses gives good results.

| | |
|---------------------|-----------|
| Kentucky blue grass | 12 pounds |
| Bromus inermis | 8 pounds |
| Perennial rye grass | 6 pounds |
| Orchard grass | 3 pounds |
| White clover | 2 pounds |
| Red clover | 2 pounds |
| Alfalfa | 2 pounds |

The appropriations to support the government amount to over one billion dollars per annum, but of this, less than twenty-five million go to support the agricultural industry.

A report from Montevideo states that the wool clip of that section will be much less than was anticipated.

There is more myth about the sheep industry of Great Britain than prevailed during the days of witchcraft.

Important!

I want to urge every Western Wool Grower to send us \$5.00 as one year's dues to the National Wool Growers Association. This includes one year's subscription to this paper.

We have on hand work of the most important character that must be carried out, but the funds now available will not permit this. We must have your help at once. \$5.00 is a relatively small matter to each individual wool grower, but with the help of all we can save the industry many thousand dollars.

As a wool grower giving my time to this organization without pay I appeal to you for assistance. Send us \$5.00 as your share to help with the work.

F. J. HAGENBARTH
President National Wool
Growers Association
Salt Lake City
Utah

"WHERE THE GOODS ARE GOOD GOODS"

**EVERYTHING
FOR
THE FARM
AND
GUARANTEES
SATISFACTION**



Utah Implement-Vehicle Company

139 South State Street

Salt Lake City, Utah

COLT 45 CAL. AUTOMATIC PISTOL

MODEL
1911



Adopted by
the U. S.
Army

ONE OF BROWNING'S PATENTS

Send a Postal for our Catalog, 150 pages—Illustrated

Everything for Every Sport in Every Season

BROWNING BROS. CO., OGDEN, UTAH

WE offer for the 1914 Fall market—
1500 HEAD of HAMPSHIRE
RAM LAMBS, ready for delivery Oct.
1st or later. These rams are WELL-
BRED grades, raised by Senator E. O.
Selway, Dillon, Montana; lambed in May
and will WEIGH about 90 POUNDS
at five months old. Sound in every way
and the KIND sometimes listed as PURE
BRED UNREGISTERED.

Every ram a BLACK face and grain
fed from weaning time.



Also have 300 RAM LAMBS cross
between a RAMBOUILLET EWE and
REGISTERD COTSWOLD BUCK,
Mothers never sheared less than 12 LBS.
of wool. A CHOICE LOT of BUCKS
of this kind.

All these rams are close to Dillon and
can be easily shown.

**For Sale By
Montana Live Stock Commission Co.
Dillon, Montana**

Office Opposite Depot.

WOOL TO ADVANCE.

"Wool is the scarcest article today in the world; prices are strong and it is a riddle to most everyone how manufacturers can succeed. I have often recently pointed out the scarcity of wool through your columns. Sometimes I have been told I was entirely wrong about what I said and sometimes I have admitted having been wrong. But I have found out that on the whole I am right, and I believe that anyone who thinks wool will decline, or any animal fibre to a great extent, is very much mistaken.

"Prof. Fisher, of Yale, stated very recently that all necessities of life in the next 15 years would advance 35 per cent. Mr. Fisher made a very positive statement and it must be remembered that 35 per cent is very much of an advance. but on wool I would not be a bit surprised if we should get a 25 per cen advance in the next two years, because the primary markets are empty. We should now have the 1913 clip to use, but the 1914 clip is in consumption, the South American wools, 1914 clip, are all sold in the primary markets, the Australian is almost sold. Our domestic clip is already in consumption, and if we should get prosperous times there will then be some scrambling for wool. But everybody understands fluctuations are always due. I am speaking only in general

"I send you herewith a clipping from a Boston paper of Saturday in regard to 'United States Flags Made in England.' I am very much surprised

you did not have this article in your paper. I am not a born American and I have been in this country only about 20 years, but I flatter myself that I am more American than those gentlemen who will buy our flags 'Made in England' on account of a few per cent saved through not buying American made goods.

"Some time ago came the news of a several hundred thousand pound purchase of imported beef for our navy. To the United States there was saved about \$1,500. That article was more humorous than any of the writers thought. Beef imported to the United States to save \$1,500; or about three-eighth cent per pound as against our own beef, to feed American boys with. Now comes a worse matter, buying United States flags for our American boys to fight under, in England. Some writer could put some spirit into this and the United States official who is willing to buy those flags in foreign countries might change his way of thinking.

"We at large pay for that bunting, 100,000,000 people pay for it in direct or indirect ways, and the saving we as individuals would make on this would take a very good mathematician to figure out in percentage."—Daily Trade Record.

CONFERENCE OF GROWERS AND MANUFACTURERS.

The United States Secretary of Agriculture has just advised the National Wool Growers' Association that he has called a conference of wool growers and manufacturers to meet in Washington, D. C., June 2, 3, and 4.

A few days ago Mr. J. E. Cosgriff of Salt Lake City returned from Washington and announced that such a conference would be held, and we now have the official call from the Secretary.

Among the topics to be discussed at this meeting are the Manufacturing Value of American Wools; The Improvement of Farm and Range Meth-

ods of Handling Wool; The Possible Adaptation of Foreign Methods to American Conditions; Improvement in Methods of Marketing; Improvement in Methods of Breeding; The Standardization of the Wool Clip; The Damage by Dogs and Predatory Animals.

The National Wool Growers' Association has been invited to take part in this conference, and will name a representative at an early date.

BIG HEAD IN SHEEP.

Under the above title the United States Department of Agriculture has just published a bulletin. The extracts from this bulletin were published in the last issue of the National Wool Grower, but as the bulletin contains some data not contained in the press notice, it may be well for sheepmen living in the districts where big head occurs to write the department for this new bulletin.

ADVERTISING RATES

IN THE

NATIONAL WOOL GROWER.

PUBLISHED MONTHLY AT SALT LAKE CITY, UTAH

Advertising copy must be in this office not later than the 6th of the month. No discount from these rates under any circumstances

| SPACE | 1 issue | 3 issues | 6 issues | 12 issues |
|---------------|---------|----------|----------|-----------|
| 1 inch..... | \$ 2.00 | \$ 5.00 | \$ 9.00 | \$ 18.00 |
| 2 inches..... | 4.00 | 10.00 | 18.00 | 34.00 |
| 1/4 page..... | 14.00 | 40.00 | 75.00 | 130.00 |
| 1-3 page..... | 18.00 | 50.00 | 92.00 | 170.00 |
| 1/2 page..... | 22.00 | 62.00 | 110.00 | 200.00 |
| 1 page..... | 36.00 | 100.00 | 175.00 | 325.00 |

Special Positions 20 per cent Extra.

FOX FARMING ON EXTENSIVE SCALE.

(Consul General Frank Dillingham,
Winnipeg, Canada.)

It is reported that an Eastern syndicate intends to establish a large fox ranch in the Winnipeg district, which will probably rank second to none in the world; 200 to 300 of the choicest animals to be found in the north will be procured by a Prince Edward Island man to start with. It is stated that the fox ranch when established, will be one of the most extensive and elaborate of its kind in the world. The confidence of Eastern capitalists in western Canada as a fox-producing region is assured, and great developments may be expected in the business this year.

NEVADA BANKERS' MEETING.

The Nevada State Bankers' Association will meet in Reno, Nevada, in annual convention May 22nd and 23rd. Mr. J. E. Cosgriff, president of the Continental National Bank of Salt Lake City, Utah, will address this bankers' meeting on the future of wool growing in Nevada. Nevada appears to be one of the states that is not filling with homesteaders as rapidly as some of the other range states, and no doubt for many years to come wool growing will continue to be one of the chief industries of that state. Mr. Cosgriff is a man particularly well qualified to speak upon the subject of wool growing, and his address to the bankers of Nevada should prove very valuable.

COWBOYS IN THE ARGENTINE.

As to the opportunity for American cowboys in the Argentine the United States consul at that country makes the following report.

"The difference between the methods of working cattle in this region and those employed in the United States is so great that it is not likely that there would be any demand for Ameri-

For Sale HAMPSHIRE RAMS

I have For Sale a number of registered Hampshire yearling, and ram lambs. Breeding and individuality as good as can be had.

A. W. RUCKER
MORRISON, COLORADO

Consolidated
Wagon
& Machine Co.

Leading Implement and Hardware Dealers

WOOL GROWERS SUPPLIES
At 52 Places in Utah and Idaho

THE BEST SERVICE

FOR BANKS AND STOCKMEN
HAVING ANY TRANSACTIONS
AT THE CHICAGO LIVE STOCK
MARKET IS SECURED BY AN
ACCOUNT WITH

THE LIVE STOCK EXCHANGE NATIONAL BANK
OF CHICAGO

"THE BANK OF GOOD SERVICE"

CAPITAL \$1,250,000

RESOURCES \$15,000,000

"THE GIFT STORE"

There is no season for giving. A gift is acceptable always. 'Tis true that Christmaside, Wedding-days, Anniversaries and Birthdays are milestones on life's journey that we oftenest mark with gifts

Beautiful, Serviceable China will cost you no more than some trivial thing. You can buy a few pieces, a breakfast set or a full dinner set. Three times a day it will bring pleasure to yourself and guests.

Callaway, Hooch & Francis

66 MAIN ST., SALT LAKE CITY

We carry everything needed for use or
adornment of the dinner table

"THE DINNERWARE HOUSE"

CULLEN HOTEL

SALT LAKE CITY, UTAH

FRED J. LEONARD, Mgr.

Headquarters for Sheepmen

More Sheep bought and sold in the Cullen
Hotel than in any hotel in the United States.

Rates \$1.00 and up.

can cowboys or riders here. The cattle ranches in the central and southern parts of the Province of Santa Fe are generally of alfalfa or other artificial grasses and divided into paddocks of 400 to 1,600 acres. Very little horseback work is required. The usual pay in this part of the country is \$20 American gold per month, with board. In the northern part of the Province, where the "estancias" (ranches) are larger, conditions are different, the pay is slightly less, and there is an excellent class of cattle workers, mostly from the adjoining Province of Corrientes.

In the central part of the Province of Santa Fe a league (6,000 acres) will carry about 3,000 horned cattle, several flocks of sheep, and 200 or 300 horses and mares. In the north the same area will carry perhaps one-third as many cattle. Food allowance to cattle riders consists of 6 pounds of sugar and 6 pounds of yerba maté per month, 1½ pounds of beef per day, rice, corn, macaroni, and occasionally vegetables. There does not appear to be any opening for ordinary cattle riders from the United States in the district. Good American foremen would probably be successful, but the salary, \$40 to \$50 United States gold per month, would hardly be attractive. A good man could, however, under favorable circumstances work up to the position of manager.

The foregoing are the views of an American of wide experience in farming and cattle raising, who is thoroughly familiar with conditions in the Rosario district."

CROP CONDITIONS.

The Bureau of Statistics crop estimated for May has just been issued. It shows the condition of winter wheat to be 95.9 as compared with 91.9 on this date a year ago, and 85.5 as the average for the past ten years.

Advertisers who wish to reach western sheepmen will find the National Wool Grower the best advertising medium.

NOTICE OF MEETINGS

Mr. J. E. Cosgriff of Salt Lake City has employed Mr. W. T. Ritch of Australia, an expert in the handling of wool and breeding of sheep, to address Western Wool Growers upon these two important subjects. Mr. Ritch is now in Salt Lake City and will be glad to address meetings of Wool Growers in any part of the West.

Mr. Ritch has an interesting story to tell with which all Wool Growers should become acquainted. He is here intirely at the expense of Mr. Cosgriff and his services are absolutely free to the sheepmen. He will be glad to address meetings wherever they are arranged for him.

If you desire him to address the sheepmen of your section arrangements for the meeting should be made with Mr. J. E. Cosgriff, Salt Lake City, Utah.

It is the hope of the National Wool Growers Association that meetings be arranged in all parts of the Western country.

SHEEP AS WEED

ERADICATORS.

The Reclamation Commission has authorized the purchase of 1,000 sheep for eradicating weeds on ditches on the Salt River project. It is estimated that the sheep will cost \$5,000; to be considered as part of the 1914 expenditures for operation and maintenance. The value of sheep for this purpose was clearly demonstrated in 1913, when experiments were made on the Salt River project to determine whether they could be used effectively to clean the Johnson grass from the canals and laterals. About 175 head were placed on five miles of badly infested canals with the following results:

1. Seeding was effectively prevented.
2. Cost of cleaning and maintaining canals was decreased. The cost per mile in 1912 was \$235.41, including cost of shoveling, gopher poisoning, repairing breaks, materials, etc. The sheep were on the laterals from April 19 to October 12, the total cost of two herders being \$91.10 per mile. The canals were then cleaned out with slip scraper and shovels at a cost of \$75.76 per mile, or a total of \$166.86 per mile, a decrease of \$68.55 per mile over the previous year. Two herders can care for three times the number of sheep and cover three times the territory, so that the cost of herding would be cut down to \$30.37 per mile, making the total cost, including maintenance, \$106.13, or a saving of \$129.28 per mile per year.

3. The Johnson grass was practically destroyed. Examinations were made by Professor McOmie of the Arizona Experiment Station, who expressed the opinion that another year of close cropping would practically kill out all of the grass.

4. Demonstrated to the farmer what can be accomplished with sheep on his private laterals. One rancher in particular, Mr. W. S. Humbert, experimented with sheep for the entire year 1913. Sixty head were placed on the west 80 acres of his quarter section, the laterals on the east 80 being

May, 1914.

maintained by farm labor. The cost of maintenance on the 80 acres where the sheep were located was \$5, while the cost where there were no sheep was \$225. At the end of the Johnson grass season 40 sheep were sold at an increased valuation over the purchase price of \$1 per head, a sufficient number of lambs being left to make a flock of 60 sheep for the work during 1914. The wool was sold at a profit of \$20 for the flock. At the end of the season the laterals maintained by the sheep were in better condition than those maintained by farm labor. Mr. Humbert has demonstrated that he can not only maintain his laterals by the use of sheep, but instead of doing it at a considerable expense he has turned the Johnson grass into a revenue producing asset. The initial expense consisted of the small amount of money necessary to fence the laterals and purchase the sheep.

5. The sheep were fat enough for market after feeding on the Johnson grass for about three months.

6. The laterals were not damaged. On the contrary, the packing of the dirt by constant trampling has probably cut down seepage. One of the favorable results was the disappearance of the gophers. Practically all gopher work disappeared after the sheep had been on the laterals for three months. If the gophers can be eliminated by pasturing sheep on the laterals, the repairing of breaks, 90 per cent of which are due to gophers, will be cut to a minimum.—Reclamation Record.

OREGON WOOL SALES DATES.

We are advised that wool sales are now scheduled at the following Oregon points:

Juntura, May 18; Pilot Rock, May 18; Echo, May 21, 22; Pendleton, May 23; Heppner, June 2; Shaniko, June 4; Baker, June 6; Ontario, June 8, 9; Vale, June 10; Pilot Rock, June 15; Hunts Ferry, June 16; Madras, June 17; Shaniko, June 19; Condon, June 23; Heppner, June 25; Joseph, June 30; Enterprise, July 1; Baker, July 2; Bend, July 7; Shaniko, July 9.

FEED AT ASHTON

I have purchased the feeding yards at Ashton, Illinois, on the line of Chicago & Northwestern Railway. **Finest grazing, sheds for feeding hay and grain, good shearing plant.** I am a practical stockman and assure all who use these yards the **best possible service.**
W. H. SANDERS.

Give ASHTON YARDS a trial.



WE GUARANTEE high grade workmanship and materials and cater only to those who want the **BEST.** We are distributors of

Michelin Tires

**AUSTIN
TIRE & RUBBER
COMPANY**

130-132 East Broadway
Salt Lake City, Utah

Tel. Wasatch 3010

Advertising in the National WoolGrower bring results.

WHEN YOU ARE READY FOR THE PRINTING

of that Catalogue, Prospectus, Booklet, Folder or anything that goes to upbuild your business, it would be well to confer with a printing house that can give you a product which will accomplish what you intended it to. You will find no printers better equipped to do the work and do it in the way it should be done than the

CENTURY PRINTING COMPANY

We print the Wool Grower and many other high-class publications.

Salt Lake's Printers

W. G. ROMNEY. J. Q. RYAN.

CENTURY BLDG., 231-3-5 EDISON ST., SALT LAKE

**Courtesy, Helpfulness,
Strength**

National Copper Bank
SALT LAKE CITY

NEW GRAND HOTEL

Fourth South and Main

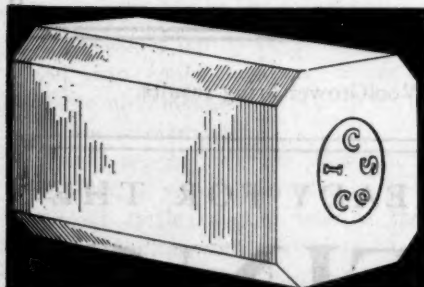
\$1.50 rooms with bath. Without bath \$1 and up.
Nothing in Salt Lake to equal it for the money.
WM. ANDERSON, Prop. SALT LAKE CITY

HOTEL UTAH

SALT LAKE CITY

ROOMS WITHOUT BATH
\$1.50 AND \$2.00 PER DAY
WITH BATH \$2.50 AND UP

"The very best of everything at sensible prices"



The most economical and perfect stock salt in the world. The proof is in the use. Manufactured by INLAND CRYSTAL SALT CO., Producers of Royal Crystal Salt, Salt Lake City, Utah.

**SULPHURIZED
ROCK SALT**

Mention The National Wool Grower.

THE WOOL OUTLOOK.

During the past interval, despite the holidays and a somewhat quiet period as regards new business, the wool position has strengthened rather than otherwise. The situation is of course simplified by the fact that the overseas markets are now closed, and the supplies are now restricted to London, where the quantities on the one hand and the world's demand on the other, are easily determinable. There is no doubt about the easy absorption of the residue available for the year. The only question is whether in merinos the supply will be adequate for the requirements and needs of the industry.

The situation in merinos at the moment is one that is causing serious concern in the fine worsted trade. The preference for fine goods is still very marked, and the quick absorption of this season's Colonial clip has been surprising. The Home trade is undoubtedly very badly placed as regards its stocks, and unfortunately there seems to be little chance of relief either in values or in any augmentation of supplies until the new clip arrivals towards the end of the year. It becomes increasingly evident that machinery cannot be kept fully supplied this year with fine wood, and one is forced to the conclusion that the machinery requirements of our industry have fully overtaken the supply of raw material.

Crossbreds do not constitute so serious or so urgent a problem, being plentiful at this series. They will however, find a ready demand. The world's competition will be focussed in London, while the shortage in the River Plate clip is already being felt, these latter wools having practically all gone into consumption. Moreover, Yorkshire is unusually bare of stocks and will require to operate heavily. Consequently, when a broad view is taken, and when the available surplus after this series for the remaining six months of the year be taken into the

reckoning, the strength of the position in crossbreds is self-evident. The undue preponderance in the production of 44s to 46s grades, which is yearly becoming more marked, tends to keep these sorts at a relatively cheaper level, but they are thus working out their own salvation and creating a demand.

Cheap money is fortunately favoring the situation, minimising the chances of any weakness in the market because of heavy supplies at this series.

The values in fine wools are now approaching the danger point of 1899, but there seems to be little chance of relief under the present conditions of demand and supply in these sorts.

H. DAWSON & CO., London.

LOOKING UP KARAKULES.

We are advised that Prof. R. K. Nabours of the Kansas Agricultural College is about to leave on a visit to Turkestan and other parts of Asia and Russia to investigate the subject of Karakule sheep in their native country. Professor Nabours has been investigating this subject in the United States and believes that it is worthy of a fuller study and it is for this purpose as well as for the importation of Karakule sheep that he soon leaves for Russia.

INCREASED SLAUGHTERING.

Word from Chicago under date of May 8th, was to the effect that the supply of sheep and lambs at the five principle markets for the week ending May 9 would exceed by 50,000 head, the supply available for the previous week. It is said that the total quantity available was but a few thousand less than the corresponding week of the preceding year. This seems to be the first week of this year that the five principle markets have had less sheep and lambs for slaughter than for the same week of the preceding year. Choice wool lambs made up to \$8.90.

COMMISSION REPORTS THAT IT COSTS 55 CENTS A BUSHEL TO RAISE WHEAT IN SASKATCHEWAN.

Washington, D. C.

American wheat growers and farmers will be interested in a report of a commission appointed by the government of Saskatchewan "to examine into the ways and means for bettering the position of Saskatchewan grain in the European markets." Incident to this investigation the commission looked into the cost of producing wheat under present conditions in that province of Canada. The wheat producers of various sections of the United States will be interested to know that under present conditions the cost of producing wheat as determined by the commission is reported to be 55 cents per bushel on the farm and 62 cents per bushel f. o. b. cars at country points. According to the report, the cost of production has increased 12.15 per cent since 1909, while, on the other hand, the price of wheat to the Saskatchewan farmer has decreased from 81 1-5 cents per bushel in 1909, to 66 1/2 cents per bushel in 1913, leaving a net return, on this basis, of 4 1/2 cents per bushel to the farmer.

It is possible that the interesting figures which have been developed by the Grain Commission will account for the fact that a large number of American farmers who have, in recent years, left the states to engage in farming in this territory are now asking for a certificate which permits the return of household effects to the United States. If the economic situation suggested in the above statement is not the cause, perhaps it may be found in the long and rigorous winters characteristic of this section as compared with those in the leading farming districts of the states.

It is reported that the average acre value of all the crops in the United States last year was \$16.31 per acre; the average value in 1867 was \$15.09 per acre. It does not appear that we are progressing very rapidly.

Farmers and Stockgrowers Bank

SALT LAKE CITY, UTAH

Capital \$300,000.00

Surplus and Profits \$20,000.00

National City Bank

CAPITAL AND SURPLUS \$300,000

SALT LAKE CITY, UTAH

Buick National Oldsmobile

THE CARS OF THEIR CLASS

Power, Speed, Endurance, Economy and Refinement

For demonstrations, write or telephone

RANDALL-DODD AUTO CO., Ltd.

EXCLUSIVE DISTRIBUTORS

UTAH

IDAHO

WYOMING

Salt Lake City, Utah

Boise, Idaho

When Writing to Advertisers Mention The National Wool Grower

The McIntyre Building

Salt Lake City, Utah

Is Headquarters for the
NATIONAL and UTAH WOOL
GROWERS' ASSOCIATIONS

The Most Modern Fire-proof Building in the City

OFFICES FOR RENT

"BLACK LEAF 40"

**A Concentrated Solution of
Nicotine-Sulphate
Guaranteed to contain not
less than 40 PER CENT
NICOTINE**

Nicotine in the form of "Sulphate" does not evaporate at ordinary temperatures, whereas "Free" Nicotine does evaporate. Therefore, the "Nicotine-Sulphate" is particularly desirable for all purposes requiring a nicotine solution possessing "lasting" qualities.

10 Pounds, \$12.50

**Makes 683 Gallons of Sheep
Dip Containing "Not Less Than
 $\frac{7}{100}$ of 1 per cent Nicotine"
The Official Nicotine Require-
ment—No Sulphur Being
Necessary.**

Also Sold in the Following Sizes:

2 Pounds, \$3.00. $\frac{1}{2}$ Pound, 85c.

"Black Leaf 40" is about 14 times stronger than our "Black Leaf" extract, yet with only about one-twelfth the shipping weight. This means a big saving in handling—especially over rough roads. Does not stain nor injure wool. Is non-poisoned to sheep and cattle. Is permitted for official dippings for scabies.

**Manufactured by
The KENTUCKY TOBACCO
PRODUCT CO.**

Incorporated

LOUISVILLE, KENTUCKY, U. S. A.

**Branches: Richmond, Virginia,
and Clarksville, Tennessee.**

FOREIGNERS INTERESTED.

Sometime ago the Secretary of the National Wool Growers' Association caused a letter to be published in the Wool Record of Bradford, England, calling attention to the volume and availability of American wools for the world's trade. In this letter foreign wool dealers and users were invited to participate in the American market by purchasing American wools. Since the publication of that letter, we are pleased to announce that several foreign wool dealers have indicated a desire to know more about American wools with the ultimate view of using them, providing, prices here are below a parity with London.

BOUND TO ADVANCE RATES.

It is currently reported that the railroads are considering a proposition to establish extra charges, in addition to the present rates, for the handling of livestock in and out of livestock markets. It is said the proposed increase will average about 75 cents per car. The American National Livestock Association has notified the roads that this advance will be stubbornly contested. In this work they will have the full support of the National Wool Growers' Association.

MEXICAN LAMBS REACH \$8.70.

The highest price for lambs since April of last year was paid May 11 for 453 head of Colorado Mexican lambs averaging 72 pounds that commanded \$8.70. This shipment was owned by James G. Milne of Lucerne, Colo., who feeds quite a few lambs every year and has now several cars of this year's feeding still on feed. The principal ration for the lambs that topped the market today consisted of $1\frac{1}{2}$ pounds of corn per head per day, alfalfa hay and all the soft salt the lambs would take. They didn't miss a meal and put on flesh very satisfactorily. In April of last year lambs reached \$9.10—Drovers' Journal.

A BOOK OF CHAMPIONS.

In accord with its progressive spirit, the officers of the International Live Stock Exposition at Chicago have issued a book under the title "Album of International Champions."

This is a very attractive, cloth bound book and is profusely illustrated with prize winners, including an interesting history of the exposition, its origin and objects together with many facts and figures relative to international winners that will make this album a book of reference not only for purchasers of purebred livestock, but also for agricultural students and producers of the highest type of livestock.

The publication of this book has entailed considerable expense on account of the fine illustrations and the style in which it is gotten up, and it is, therefore, now offered for sale by the International at fifty cents per copy. We feel that this publication is one in which all our breeders of purebred stock, will find much of interest as it is always necessary to make reference to past winners, and we, therefore, anticipate that the demand for the publication at this low price will be very heavy.

For some reason or other a considerable number of members have not paid their dues to this association for 1914. We hope dues will be forwarded at once so that we can make arrangements for the amount of work that can be handled during the year.

It is said that at the present rate of movement to the cities that in less than 50 years 80 per cent of our people will live there leaving but 20 per cent to feed the 80 per cent.

We believe that the highest priced clip sold in Utah this season was 20½ cents. As this was a light shrinking clip it only brought about 37 cents clean.

When you see 64s wool quoted abroad it just means the same wool as our Merino fine wools in this country.

DO GOOD RAMS PAY?

Speaking of rams and their influence on profit and loss a very prominent Idaho wool grower said to us the other day: "In the Soda Springs country I know of two sheepmen using the same range and taking about the same care of their sheep. Each have the same grade of ewes. Last year one of these men sold his lambs and they net \$2.50 per head; the lambs of the other man net \$3.85 per head and they were worth the difference. The first outfit of lambs weighed 54 pounds; the second 76 pounds. So far as I can see the only difference in these two outfits is in the class of rams they use. One man is using scrub rams that cost him \$7.00 per head; the other is using rams that cost \$20.00 per head. If we figure that each ram got 40 lambs then the \$20.00-ram was worth \$54 and at this price had the same earning power each year as did the \$7.00-ram. Poor rams have put a lot of sheepmen out of business. Next to hard winters they are the worst thing a sheepmen has to contend with."

ENGLISH SHEEP DECLINE.

The number of sheep returned in 1913 for England and Wales was 17,130,286, being 923,079, or 5 per cent less than in 1912. The number of ewes kept for breeding was 448,818 less, of sheep aged under one year 250,155

LIVE STOCK GROWERS' ATTENTION!

The Utah Packing & Provision Co., is in the market all the time for cattle, sheep and hogs. Call us up by long distance, or wire for prices.

JOHN PINGREE, President Phone 3831 North Salt Lake

HEBER LAND AND LIVE STOCK COMPANY

Main Office 326 Vermont Bldg., Salt Lake City, Utah

J. E. AUSTIN, General Manager

COTSWOLD THOROUGH-BREDS

Breeders and Sellers of the very best grade of thorough-bred Cotswold Rams, as well as owners of large tracts of spring, summer and winter ranges in Wyoming, well stocked with high grade range sheep.

MARK AUSTIN, President

THOS. R. CUTLER, Vice-Pres.

GEO. A. SMITH, Sec'y & Treas.

THOMAS H. AUSTIN, General Manager

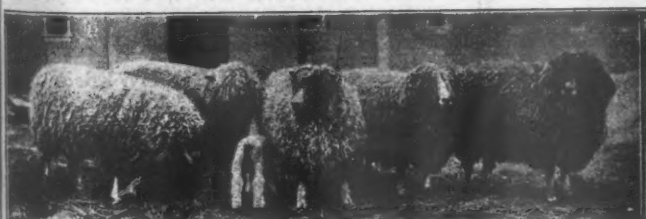
Austin Brothers' Association

Main Office 326 Vermont Bldg., Salt Lake City, Utah

Buyers and Sellers of all grades of range sheep, mutton and lambs. Breeders of thorough-bred Cotswold rams. Owners of good grade of range ewes. Doing an extensive feeding business in Idaho.

EXCELSIOR STOCK FARM

J. R. ALLEN & BROS.
DRAPER, UTAH



The World's greatest flock of Cotswold consisting of 3000 registered breeding ewes of best breeding and highest merit. The best blood imported from England for past twenty years has been added to this flock.

Many of the best Hampshires produced in America and England including the leading prize winners have been added to our flock.

They winter 4000 and summer 10,000 feet above sea level. They are raised on the range under the most favorable conditions known conducive to perfect health. No stomach or lung worms so prevalent in eastern bred sheep. For flock leaders we can furnish rams that cannot be excelled and we think superior to best ram brought to this country from England. We are offering 1000 Yearling Rams, 1500 Ram Lambs, a few cars of Breeding Ewes and Ewe Lambs. Come and see us and these sheep—you are always welcome.

F. W. HARDING**ANOKA FARMS WAUKESHA, WISCONSIN.****IMPORTED SIRES**

I will import on order—Cotswold, Hampshires, Lincolns, Shropshires, Yearling rams or ram lambs or field ewes. Are you in the market for STUD RAMS to sire your range Rams?

**Model Farm
Rambouillets**

Foundation flock of Kimball ewes and Seeley rams. Ours are heavy necked, large sized sheep, well covered with dense fleeces.

We offer 300 one, two and three year olds, and 100 ram lambs.

Come and see them or write us.

Craner & Goodman Co., Corinne, Utah

LINCOLNS COTSWOLDS

We have for sale 150 yearling Lincoln Rams and 150 yearling Cotswold Rams, also a few cars of Ram Lambs. 160 of these rams are fit to head the best stud flocks.

R. S. ROBSON & SON
Denfield, - Ontario, Canada

HOGS FOR SALE

I have for sale registered Duroc Jersey boars and sows of all ages.

Reasonable prices.

JAMES H. MOYLE

Deseret Bank Bldg. Salt Lake City, Utah

Mention The National Wool Grower.

less, and of sheep of one year and above 224,106 less.

The total number of sheep is the smallest on record, the numbers of breeding ewes and of other sheep aged one year and above are the smallest shown since 1893, when they were first separately distinguished in the returns; the number of sheep under one year of age is the smallest shown in these returns since 1883, when 6,780,310 were returned.

It is evident that sheep are, generally speaking, not suitable for small-holdings; but it may be questioned whether the extension of small-holdings has yet been so considerable in sheep-breeding districts as to be reflected in the total number of sheep returned.

Among other causes, a heavy mortality among sheep during the winter of 1912-13, is referred to by eight reporters in the southwestern counties, and an unfavorable lambing season is mentioned by three reporters.

The serious reduction of the breeding ewes—from 7,148,109 to 6,699,291—was more pronounced in some divisions of the country than in others. In the eastern counties a loss of 10 per cent occurred, in the northeastern and west midland counties, 9 per cent; in the southeastern counties, 7.5 per cent; in the east midlands, 7 per cent; in the southwestern counties 6.6 per cent; in the northern counties, 4 per cent; and in the northwestern counties, 2.4 per cent. In Wales the loss was nearly 5 per cent.—Livestock Journal.

HORNS ON HAMPSHIRE.

From Idaho comes this inquiry: "I purchased some time ago a flock of Hampshire ewes. These ewes were supposed to be purebred but not registered. Last year about 5 per cent of the lambs, from these ewes and purebred registered bucks, had horns. Do you think these ewes are purebreds?"

In dealing with the black-faced breeds of sheep, no matter how purely they may be bred, one must always expect a small percentage of horns as these breeds probably all originated

from horned ancestry, and in the case of some breeds, not very long ago. Under such circumstances one must expect a few horns even for the next hundreds of years. Five per cent of horns is a large percentage among Hampshires. But rather than lay the blame on the ewes we would suspect the rams. It often happens that a purebred lamb is dropped and later develops horns or stubs. These can sometimes be twisted off so that the head heals over and leaves no sign of a horn. While such a ram is a purebred he will get a considerable portion of horned lambs. Any trace of a horn in the ram should condemn him for use in purebred flocks. Men who are selling stud rams should use every care to sell nothing that shows any sign of a horn and buyers should examine the head most closely for such defects. Of course where the ram is to be used for cross breeding it matters little whether he has horns or not.

A WETHERS CONTRIBUTION.

In talking with Mr. J. D. Holliday, of Montana, about fine wool sheep he recently said: "We have a Merino wether in one of our bands that is now eight years old and has been shorn seven times. His seven clips total 141 pounds of wool or an average of slightly over 20 pounds per year. As a two-year-old he shored 23 pounds and at three-year-old 24½ pounds. This was his heaviest year. This wool has all been produced on the range and with the same care as the balance of the flock received. With reasonable care this wether will live to 14 years of age."

HIGH PRICED EWES.

On April 13th, Alex McQueen of Nebraska sold on the Omaha market 430 head of fed western ewes that weighed 115 pounds at \$6.80. This made these ewes bring \$7.82 per head at Omaha.

Notice in this paper the report of the decline in numbers of sheep in Great Britain.

OLD MERINOS.

An old book on sheep breeding recites the following bearing on the longevity of Merino sheep. "A sheepman in Australia had 15,000 Merino ewes 13 years old, near the southern boundry of Queensland. A few years ago this country was recognized as a desert for the climate seems to oscillate between a mild drouth and a severe one. From April 1888, to April, 1889, only two and one-half inches of rainfall was registered at the head station and one inch of this fell in one hour. The old ewes were turned into large pastures to take their chances, and at the end of the year 14,000 of them were still alive."

PASTURES AND**PASTURE GRASSES.**

This is the title of a bulletin just issued by the Utah Agricultural College at Logan, Utah. This bulletin deals with the question of pasture, than which no subject is of greater importance. It tells just the value of the different grasses as well as the mixtures that are apt to give best returns under given conditions. This will be a useful bulletin for sheepmen who calculate on seeding a small pasture for sheep and every man should have such a pasture.

A USE FOR WENSLEDALES.

In the crossing of Karakule rams on the long wools the end is sought to obtain a lamb that will possess a lustrous wool as well as a coat in which the fibers are very tightly curled. So far the Lincoln has proved most satisfactory for this cross but we have thought that probably the Wensledale a long woolled English breed, would give more satisfactory returns. The wool of the Wensleydale possesses lustre and has a most remarkable cur or kinkleness not found in any of the other long wools. It might prove a useful sheep for fur production in connection with the Karakule.

SHEARING PLANT FOR SALE

14 machines (inclosed gear, with grinder) all in good condition. Range about plant being taken up is occasion of the sale.

ADDRESS

F. I. LONG, Great Falls, Montana

FOR SALE!

1500 Rambouillet Rams one and two years old.
500 Delaine Rams one and two years old.
500 Lincoln Rambouillet Cross one year old.
300 Hampshire Lambs.

All lambed in February and March, in good condition and well grown.

CUNNINGHAM SHEEP & LAND CO.
PILOT ROCK, OREGON

AYRES, BRIDGES & CO.

Wool Merchants

200 SUMMER STREET BOSTON, MASS.

Western Agents: **W. W. Chadwick & Co.** 310 Dooly Block, Salt Lake City

When answering advertisements mention this paper.

J. BATEMAN & CO.

Successors to Justice, Bateman & Co.

Wool Commission Merchants

122 South Front Street, PHILADELPHIA

Liberal Cash Advances on Consignments.

Market Report Mailed on Request.

SULPHUR

ALL GRADES—ANY QUANTITY
FROM A BAG TO A CARLOAD

Z. C. M. I. Drug Store

WOOL BAGS

We handle more Wool Bags than any dealer in the inter-mountain region.

PAPER TWINE

"Reliance" Paper Fleece Twine has the greatest possible tensile and tying strength.



SHEEP SHEARS

B. B. A. and 71 or
Trades Union Shears

SOFT ARKANSAS and
LILY WHITE OIL
STONES

SALT LAKE CITY,
UTAH

"RELIANCE"

PAPER FLEECE TWINE

BEST STRENGTH

Under all conditions and use. Not affected by carrying over from one season to another.

SCHERMERHORN BROS. CO.
CHICAGO, ILL. OMAHA, NEB.

SHEEPMEN

Send your orders for
CORN, OATS and FOOD STUFFS to
Farmers Grain and Milling Co.
Salt Lake City, Utah
Suite 601. Judge Building



Salt Lake City, Utah

It is said that the total value of the farm crops including livestock was around \$9,000,000,000.00 last year.

WOOL OUTLOOK GOOD.

To The National Wool Grower:

I hope the wool growers will hold on under the new tariff for wool prices should be high in the near future as the clip of the world is not keeping pace with the demand and by 1917 the wool growers will have protection again. In 1855, with wool practically free, Ohio XIX wool brought 50c. It may never reach that again as worsted machinery has revolutionized values of different grades of wool but the English blood wools will bring 50 per cent more than they do today.

The low price of goods to the consumer under the new tariff has not materialized. Foreign goods are held at the old prices. What reductions have been made are on domestics. Foreign gloves retailed at \$1.50 to \$2.00 for first and second grades. The tariff has been reduced 25 and 35 cents respectively on each grade but not one retailer has reduced the price of these gloves to the consumer. I saw at 95 cents gloves of domestic make that were in every way the equal of the imported gloves that sold at \$1.50, in fact they were better finished. But we have a lot of people that think everything must be imported to be worth anything. The retailer has the whip hand of our manufacturers but they encourage this deception as the profits are greater. Some years ago a tailor who "under no circumstances would handle anything but imported cloth" showed me a pattern made in my own mill in Philadelphia.

EDWARD GREENE,
Philadelphia.

RUSSIAN WOOL CLIP LIGHT.

A report from the United States Consul at Moscow, Russia, says that the Russian wool crop of 1913 was much short of the preceding crop and as a result the price for the 1913 clip advanced. The shortage was so acute that some of the local mills did not obtain sufficient wool for their own needs. The price of Merino wool for 1913 was from 1.8 cents to 2.1 cents higher than in 1912.

BRITISH SHEEP.

Completed Classified List.

| Kind of Land | Breed |
|--------------|--|
| MOUNTAIN: | Highland Blackface. Herdwick. Rough Brownfaced. Welsh Mountain. Ronaldshay. St. Kilda. Manx. |
| HILL: | Cheviot. Shetland. Kerry Hill. Radnor. Limestone. |
| DALE: | Wensleydale, Bluefaced. Wensleydale, Longwool. Swaledale, "Masham." . . . Cotswold. Gritstone. |
| HEATH: | Clun Forest. Penistone. Mayo Horny. Norfolk Horn. |
| MOORLAND: | Lonk. South Devon. Dartmoor. Exmoor. |
| LOWLAND: | Lincoln. Devon Longwood. English Leicester. Romney. Border-Leicester. Roscommon. Galawater. |
| DOWN: | Shropshire. Ryeland. Oxford. Hampshire. Suffolk. Southdown. Dorset-Down. Dorset Horn. |

There are 40 distinct breeds of sheep in Great Britain, twenty-eight having flock-book records.

W. T. RITCH.

NEW ZEALAND WOOL PRICES.

The following table gives the prices of some New Zealand clips for the last four years and partially explains the present prices for wool in this country:

| Clip— | 1911 | 1912 | 1913 | 1914 |
|----------------------|------|------|------|------|
| Poukawa | 27c | 28c | 31c | 32c |
| Motuotaria | 29 | 28 | 31 | 32 |
| Mokoepa | 29 | 27 | 30 | 32 |
| W. D. | 29 | 27 | 29 | 31 |

The above prices are said to be for representatives clips of the better grades of New Zealand wools. This table shows that these wools average about 4½ cents per pound more than they did in 1912. Is it any wonder that wool has advanced in value in this country?

LINCOLN OR COTSWOLD.

A subscriber asks, "Does Lincoln wool bring more than Cotswold wool, and if so, how much? It being finer it should bring more should it not?"

In this market no distinction is made between Lincoln and Cotswold. Both are classed as braid wool and ordinarily sell at the same price. There are occasional times when Lincoln wool brings slightly more than Cotswold for the manufacture of lustre goods, such times are rare, however. Lincoln is not finer than Cotswold. It is coarser, in fact Lincoln wool in the old country is credited with being about the coarsest of all the coarse wool. In addition to its coarseness, it possesses a decided lustre, possessed by but few other wools. This gives it a special value for making bright goods. The Cotswold wool is not so lustreous, it being classed as a demilustre wool. Based on the fineness of the fibre there is but little difference in the value of any of the coarse wools.

WOOL NOTES.

Burke Bros., of Hogan, Montana, have sold to Eiseman Bros. their clip of approximately 250,000 pounds for 19 cents. Last year this clip brought 19¾. A small portion of the clip is half blood and the balance is fine combing.

It is reported that Wisconsin will this year produce only about two-thirds as much wool as she did last year. Many dealers have gone out of business as a result of the decline.

Before selling or consigning your clip read carefully the advertisements of wool commission houses in this paper. There is every reason that among them you will find some of the best houses in the trade.

It is said that the new clip wools that have arrived in eastern markets have shown up exceedingly well and rapidly passed into consumption.

Recently the editor received a notice from a large tailoring establishment in Chicago that on account of the reduction in the tariff their firm was now able to sell tailor made suits (con-

Attention Wool Growers
Salter Bros. & Co.

Wool Brokers

**216 SUMMER STREET
 BOSTON, MASSACHUSETTS**

Solicit wool shipments for direct sale to the mills. Always sold subject to shipper's consent. Liberal advances. Best of references.

Coates Brothers

**Wool Commission
 Merchants**

Philadelphia, Penn.

Offer best facilities for the handling and sale of wool. **LIBERAL ADVANCES.**

FARNSWORTH, STEVENSON & CO.

Wool Merchants

Consignments Solicited

116-122 Federal Street

BOSTON

William Farnsworth

R. H. Stevenson, Jr.

E. W. Brigham

T. S. Conant

I Am the First and Original Manufacturer

making a specialty of extra long staple wool.

I pay extraordinary high prices for 16-inch staple and longer

**SUBMIT SAMPLES AND WRITE FOR FURTHER PARTICULARS
 LONG WOOL EXCLUSIVELY**

L. LEVUSOVE, 152-154 Third Ave., New York City

Roope Eddy Company

WOOL

COMMISSION MERCHANTS

Liberal Cash Advances Made on Consignments

284 Summer St., BOSTON, MASS.

Romney Sheep



Romney sheep under free trade make fortunes for woolgrowers in South America and New Zealand. It is Romney mutton that is coming to our ports. The Romney is the best breed to put on our ranges to cross on the Merino.

Send for literature

JOSEPH E. WING

Secretary

Mechanicsburg, Ohio

taining \$1.50 worth of wool) for \$45 per suit. Woolgrowers will please order them a suit when in Chicago next time.

The Malheur Livestock Company of Skull Springs, Oregon, have sold their clip of 20,000 fleeces for 16½ cents.

In a book on sheep and wool in South Africa, the author says Merino ewes have been known to breed up to 24 years of age.

The American Woolen Company have opened a selling agency in London and expect to sell American made goods in competition with that made in England. If our manufacturers can invade the foreign market they can no longer tell the woolgrower that the reduction in the tariff on manufactures of wool has made it necessary to reduce the price of wool.

Frank L. Clark of Billings, Montana, has recently sold 26,000 fleeces of Montana wool on the sheep's back at 17 cents.

Colin Campbell of Flagstaff, Ariz., has sold his large clip at a price reported to be 22½ cents. The wool is one-half blood and of light shrink. So far this is the highest priced clip reported from Arizona.

LONDON'S WOOL SUPPLY.

The Wool Record reports that London has less wool available than at any time since 1905. As an accurate record of the amount of wool purchased is available; this shows that compared with last year at this time Great Britain has purchased 48,000,000 pounds less wool than a year ago. As compared with other years the deficiency is even greater.

IDAHO WOOL SALES DATES.

Secretary Hugh Sproat, of the Idaho Wool Growers' Association, announces the following provisional sales days: Mountain Home, May 19; Boise, May 25; Mountain Home, May 26; Caldwell, May 27; Payette and Weiser, May 28; Cambridge, May 29; Midvale, May 30; Mountain Home, June 10; Payette and Weiser, June 11; Cambridge, June 12; Midvale, June 13;

Boise, June 22; Mountain Home, June 23; Caldwell, June 24; Payette and Weiser, June 25; Cambridge, June 26; Midvale, June 27.

SHEEP AND WOOL DECLINE.

The National Wool Warehouse & Storage Company of Chicago sent letters of inquiry to all the bankers in Montana, Wyoming, Idaho, Utah and Oregon asking them to give their opinion as to the relative number of sheep in their section on January 1, 1914, as compared with January 1, 1912. These replies were then tabulated with the following result: Montana, decrease 40 per cent; Wyoming, decrease 20 per cent; Idaho, decrease 10 per cent; Utah, decrease 15 per cent; Oregon, decrease 10 per cent. It is also estimated by this same source that the 1914 clip will be 25,000,000 pounds short of 1913. Is it any wonder that wool prices are advancing?

This word having been obtained from western bankers who are intimately connected with the sheep industry we are disposed to look on it with a great deal of confidence.

ARE AMERICAN DOMESTIC WOOLS SUITABLE FOR ENGLISH USERS?

By S. B. Hollings.

Attention has been recently called to the general utility of United States grown wools, and the question has been asked if they cannot be used by European spinners and manufacturers. One must answer in the affirmative. So long as they are suitable for United States mills, they cannot but be suitable for English mills where the same combing and weaving machinery is used. There is nothing wrong with the quality of American wools, but the grading and classing leaves very much room for improvement, and they will have to be presented in a far more attractive manner if they are to command the attention of Yorkshire topmakers, spinners and manufacturers. The wools are right when viewed from a quality standpoint, but not otherwise. We are glad to say that a

movement is to be made towards improving the general get up of American domestic wools. Mr. W. T. Rich has been engaged by a leading member of the National association of wool growers, and will devote his attention to educating the wool growers in the far western states. We believe he is a capable man and right for the job. His knowledge of English sheep methods, the Bradford trade, and also the methods in vogue in Australia and New Zealand will enable him to do the good work.

We would specially call the reader's attention to the fact that there is no need to use twine at all in tying up his fleeces. We do not know why this use of paper twine is being tolerated. It is quite true that if it gets into the wool it will melt away in the scouring operation, but there is the time entailed in tying up and loosing down the fleeces, and we repeat that paper twine is absolutely unnecessary, while binder twine is nothing short of being a calamity and a disgrace.

At the last London sales there were ninety-two bales of American wool catalogued, and on the whole the staple was right, but the get up was a little short of being shameful. The writer sampled a good many of the bales, and a larger proportion of the fleeces were tied with three yards of thick hemp twine that made one shudder as the knot was untied and pulled out of the fleece. We would advise American wool growers to cease using twine altogether for tying up shorn fleeces. Either make a band of the neck end of the fleece and twist it round, or simply fold over the sides, roll the fleece and put same carefully into a bale, for it will be opened out carefully when the sheet or bale comes to be undone.

A French spinner from the city of Mazamet in a very large way of business, called at my office in Bradford towards the end of March on enquiry bent. He produced a merino underwear fabric, the yarn of which was spun from American merino wool. For many years he had been doing a very respectable trade in French spun merino yarns out of which these underwear vests and pants were being made for some of the largest firms

Jeremiah Williams & Co.

WOOL

Commission
Merchants

481 Summer Street, Boston, Mass.

Western Office, McIntyre Building, Salt Lake City, Utah

B. Harris Wool Company

ST. LOUIS, MISSOURI

IF YOU DON'T KNOW US GET ACQUAINTED

Exclusive Handlers of Western Wool

Before disposing of your wool call, wire or write our Western office

A. S. ERICKSON, Agent 206 JUDGE BUILDING,
SALT LAKE CITY, UTAH

National Wool Grower advertisers are reliable.

BROWN & ADAMS

WOOL

COMMISSION MERCHANTS

269-279 Summer Street, Boston, Mass.

JACOB F. BROWN
SAMUEL G. ADAMS
EDMUND F. LELAND

ALBERT S. HOWE
HARRY P. BRADFORD
HAROLD M. CUMMINGS

American Rambouillet Sheep Breeders' Ass'n

Volume VI ready for delivery. Pedigrees now being received for Volume VII. MEMBERSHIP FEE, \$10.00. For list of members, rules, blanks, or any other information concerning the breed, address the Secretary.

R. A. JACKSON, President,
Dayton, Washington.

DWIGHT LINCOLN, Secretary, ..
Milford Center, Ohio.

American & Delaine- Merino Record Ass'n.

This Association annually publishes the increase of the flocks, keeping the lineage by name and number of every animal so recorded.

S. M. CLEAVER, Secretary,
Delaware, Ohio.

AMERICAN SHROPSHIRE REGISTRY ASS'N.

Organized 1884. 4650 Stockholders.
Shares of Stock \$5.00. No Annual Dues.
Volume XXVII Opened October 1, 1913.
Printed Matter, Blanks, and Information
FREE upon Application to the Secretary.

C. F. CURTISS, President, Ames, Iowa
J. M. WADE, Sec'y., LaFayette, Indiana

American Hampshire Sheep Ass'n

Organized in 1889. Membership fee \$5.00. Pedigrees now being received for Vol XII of the Flock Record. Write the Secretary for information and printed matter. A postal card will bring it. Write today.

F. J. HAGENBARTH, Pres.
Spencer, Idaho.

COMFORT TYLER, Secretary,
310 E. Chicago St., Coldwater, Mich.

here in England, but it appears that one of his best customers had rejected a big quantity of yarn because of a serious complaint made by one of the wholesale houses. He said the fabric was spoiled by having specks of black all over, and that was so. The gentleman wanted to know the cause of this, although apparently he knew it before the question was answered. Placing, on the black bits of the fabric as well as the cops of yarns a magnifying glass, it was plain to be seen that the material was spoiled with black and brown hairs being mixed in the yarn and the woven fabric. The spinner stated that the tops had been combed from American merino domestic wools, and these black bits had been found in the top. The question arises— from whence had they come? We are strongly inclined to think that they were the result of fleeces being tied with this black or brown hemp twine, for once they get entangled with the raw material, no man can get them out. We see no reason why American domestic wools cannot be sold to European users, but there will have to be a total cessation of the use of all string, and being unnecessary it is to be hoped that this is the least season when string of any kind will be used in the marketing of American domestic fleeces.

Editor's Note:

For fear our readers may be misled by the suggestion of our English correspondent that we discontinue tying our wool with any kind of twine, we desire to explain that our correspondent does not understand the way our wools are handled in this country. He labors under the idea that our wools are baled and graded, which if true would dispense with the use of all twine. But as our wool is neither baled or graded it is indispensible that the fleeces be tied with paper twine. When wool is sacked and tramped in by the feet it follows that if the fleeces were not tied they would be torn to pieces. Again as our wool is not graded it must all be taken out of the sack and graded and in handling it many tags would drop from the fleece if it were not tied. We have the word of manufacturers and wool dealers,

who are in a position to know, to the effect that our fleeces should be tied with paper twine. Tying is not in any way an inconvenience to the mill. Now as to tying our fleeces by rolling up the neck wool we would state that this in our opinion is out of the question except where little farm flocks are being dealt with. The time consumed to roll up the neck wool would require three times as many tiers. Anyway the practice of rolling up the neck wool is very objectionable to the mill and causes more inconvenience than does the removal of the twine.

Now as to the piece of black wool found in the French garment. We are at a loss to know where they came from unless something gained access to the wool while in the mill in France. There are no more black fibers in our wool than in Australian. We do not use any black twine in this country and very little hemp twine of any kind. Anyway one could readily tell hemp fibers.

WATER HEMLOCK.

The Bureau of Plant Industry has recently issued a bulletin on water hemlock, a widespread and intensively poisonous plant. This is one of the most poisonous of all wild plants and should cause extensive losses except for the fact that it is not very abundant even though it grows over a very wide area. It is far more destructive to cattle than to sheep because cattle eat it more readily. As this plant grows in all our range states, we suggest that stockmen write the Bureau of Plant Industry, Washington, D. C. and obtain Bulletin No. 69. The illustrations in this bulletin will immediately familiarize anyone with this plant.

FEEDING LAMBS PAY.

An Illinois subscriber writes us "I have been feeding Idaho lambs for the last ten years and I have made money. I done the best on lambs last year that I have ever done. I would like to buy some this fall to feed. I want about a 56-pound lamb."